

NRO-136-11

### COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY NORTHERN REGIONAL OFFICE

Douglas W. Domenech
Secretary of Natural Resources

13901 Crown Court, Woodbridge, Virginia 22193-1453

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David K. Paylor Director

Thomas A. Faha Regional Director

May 25, 2011

Mr. C.D. Holley Vice President Fossil & Hydro System Operations Dominion Resources Services, Inc. 5000 Dominion Boulevard Glen Allen, VA 23060

Location: Prince William County

Registration No.: 70225

Dear Mr. Holley:

Attached is the Title V permit to operate your Possum Point Power Station pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution, which was issued on January 20, 2009, subsequently modified on February 10, 2010, and is now modified again, effective May 25, 2011. The modification comprises changes to, or the addition of: Conditions III.B.6, III.H.1, III.L.1, III.Q.4, III.V.1, III.A.1, VIII.B.1, VIII.C.3; Subsections III.II., VIII.DD; and Sections IX, XI and XII, as numbered on the enclosed permit.

This modified permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Dominion of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this modified permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director Department of Environmental Quality P. O. Box 1105 Richmond, VA 23218 Mr. C.D. Holley Vice President Fossil & Hydro System Operations Page 2 of 2

In the event that you receive this modified permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this modified permit, please contact John McKie at (703) 583-3831.

Sincerely,

Terry H. Darton Regional Air Permit Manager

#### THD/JRM/11136TV.doc

Attachments: Permit

Source Testing Report Format

Compact Disc (contains permit including appendices)

Cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Manager/Inspector, Air Compliance, NRO (electronic file submission)

Gerallyn Duke, Office of Permits and Air Toxics, U.S. EPA, Region III (electronic file submission)

Associate Director, Office of Air Enforcement & Compliance Assistance, U.S. EPA,

Region III

Jeff Heffelman, Director, Possum Point Power Station



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#### **Article 3 Federal Operating Permit**

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13.; 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Virginia Electric and Power Company

Facility Name: Dominion - Possum Point Power Station

Facility Location: 19000 Possum Point Road

Dumfries, Virginia

VA Registration Number:

Permit Number:

70225

NRO70225

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VIII)

Federally Enforceable Requirements - Title IV Acid Rain (Section IX)

Federally Enforceable Requirements - NOx Budget Trading Requirements (Section X)

State Only Enforceable Requirements (Section XI)

This permit has a term of four years instead of the standard five years, so that future renewals of this permit will coincide with the renewal of the Title IV Acid Rain Program requirements.

January 1, 2009 Effective Date

December 31, 2012

**Expiration Date** 

Modified May 25, 2011

Thomas A. Faha Regional Director

Signature - Date

Table of Contents, 3 pages Permit Conditions, 80 pages

#### **Table of Contents**

1.	Facility Information	
	Emission Units	
III.	Fuel Burning Equipment Requirements	
	TS 3 and 4 (ID#'s ES-3 and ES-4)	
Α.		6
В.		
C.		
D.		
E.		
	Г 5 (ID# ES-5)	۰۰۰۰ ۱۰۰۰
F.		۱۰۰۰ ۱۲۰۰۰ م
G.		
Ŭ. Н.		
i.	Testing	
J.	Reporting	
	risporting	/ ۱
K.		دا
L.	Monitoring	
<u>г.</u> М.		
N.	Testing	∠\ ^4
O.	<b>U</b>	
	TS 6A & 6B (ID#'s ES-13&14)/ASSOCIATED DUCT BURNERS (ID#'s ES-15&16)	∠3
P.	Limitations	24
Q.		
R.		
S.	Testing	
T.	Reporting	
	ILIARY BOILER (ID# ES-19)	33
U.	Limitations	ან
V.		
W.	Monitoring	36
νν. Χ.	Recordkeeping Testing	3/
Λ. Υ.		
	Reporting  JRAL GAS PIPELINE HEATERS (ID#'s ES-17 and 18)	38
Z.	LimitationsLimitations	39
	•	40
	3. Recordkeeping	
חח	C. Testing	41
טט טווא	). Reporting	42
MLL 3	SIGNIFICANT FUEL BURNING UNITS (COMBINATIONS OF ID#'s ES-3, 4, 5, 6, 7, 8,	9,
10, 1	1, 13, 14, 15, 16, 17, 18, and 19)	
	Limitations	43
FF		45
UC ACO	ANIENTLY CHUTDOWN FUEL BUDNING FOURTHEAT	46
 	MANENTLY SHUTDOWN FUEL BURNING EQUIPMENT	47
	I. Limitations	47
	ER MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)	
11.	Applicability	47

IV.	Process Equipment Requirements	49
ABOV	/E GROUND STORAGE TANK (ID# ES-26)	49
A.	Limitations	49
B.	Monitoring and Recordkeeping	49
COAL	. HANDLING AND STORAGE (ID# ES-12)	49
C.	Limitations	
D.	Monitoring	50
E.	Recordkeeping	51
F.	Reporting	
V. F	Facility Wide Conditions	
A.	Limitations	
B.	Exceptions	
C.	Recordkeeping	
D.	Relationship of Consent Decree	
VI. Ir	nsignificant Emission Units	
	Permit Shield & Inapplicable Requirements	
	General Conditions	
Α.	Federal Enforceability	
B.	Permit Expiration	
C.	Recordkeeping and Reporting	
D.	Annual Compliance Certification	
Ē.	Permit Deviation Reporting	
F.	Failure/Malfunction Reporting	
G.	Severability	
Д. Н.	Duty to Comply	
i.	Need to Halt or Reduce Activity not a Defense	
J.	Permit Modification	
б. К.	Property Rights	
	Duty to Submit Information	
L. M.		
N.	Duty to Pay Permit Fees	
	Fugitive Dust Emission Standards	
Ο.	Startup, Shutdown, and Malfunction	
Ρ.	Alternative Operating Scenarios	
Q.	Inspection and Entry Requirements	
R.	Reopening For Cause	63
S.	Permit Availability	64
Т.	Transfer of Permits	64
U.	Malfunction as an Affirmative Defense	64
٧.	Permit Revocation or Termination for Cause	
W.	Duty to Supplement or Correct Application	
Χ.	Stratospheric Ozone Protection	
Υ.	Asbestos Requirements	66
Z.	Accidental Release Prevention	66
AA.	Changes to Permits for Emissions Trading	66
BB.	Emissions Trading	66
CC.	Temporary Suspension of Enforcement	67
DD.	Carry Over of Fifth-Year Requirements	67
IX.	Title IV Permit Allowances and Requirements	68
Α.	Statutory and Regulatory Authorities	68
B.	SO <sub>2</sub> Allowance Allocations and NO <sub>x</sub> Requirements for affected units	68

C.	Additional Requirements, Notes, Comments, and Justifications	70
	IO <sub>x</sub> Budget Trading Program Requirements	
	NO <sub>x</sub> Budget Permit General Conditions	
	Standard Requirements	
	Recordkeeping and Reporting Requirements.:	
	Emission Testing	
E.	Liability	77
F.	Effect on Other Authorities.	78
XI.	Clean Air Interstate Rule (CAIR)	78
XII.	State-Only Enforceable Requirements	79

#### I. Facility Information

#### **Permittee Information**

Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060

#### Responsible Official

Mr. Phillip M. Sandino Station Director

## Acid Rain Designated Representative and NO<sub>x</sub> Budget Trading Authorized Account Representative

C. D. Holley Vice President, Fossil & Hydro System Operations USEPA ATS-AAR ID number: 002099

#### Facility ID

Possum Point Power Station 19000 Possum Point Road Dumfries, Virginia 22026

#### **Facility Contact person**

Cathy Taylor Director, Environmental Support (804) 273-3467

AFS Identification Number: 51-153-0002

ORIS Code: 3804

NATS Facility Identification Number: 003804

Facility Description: SIC Code 4911 and NAISC ID Code 221112

The facility is an electrical power generation plant that produces power for sale. The significant emissions units of the plant consist of: two natural gas or oil-fired combustion turbine generating units; two natural gas-fired boiler generation units; one oil-fired boiler generation unit; six small, peaking oil-fired combustion turbines; one natural gas-fired auxiliary steam boiler; two natural gas-fired gas pipeline heaters; and four above ground oil storage tanks. There is also a steam turbine generating unit that utilizes steam produced from waste heat exhausted from the two primary combustion turbines and from additional heat supplied as needed by duct burners on the primary combustion turbine exhaust ducts. The duct burners are significant emission units, and for permitting purposes are considered independent of the steam turbine unit, which has no direct emissions associated with it. The two natural gas-fired boiler generation units were previously fired with coal before undergoing modification in 2003, subsequently, there is coal-handling equipment on site. As of the beginning of the term of this permit there is no functioning coal-handling equipment at this facility, however, in the event that such equipment would come into use again, conditions affecting it from still-valid permits are included in this permit.

#### **II.** Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity <sup>†</sup>	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burn	ing Equi	oment / Utility Units					
ES-3	EP-3	(Unit 3) Tangentially-fired natural gas boiler - Combustion Engineering – built 1955, converted from coal firing in 2003.	1,150 million Btu/hr	Low-NO <sub>X</sub> burners	N/A	NO <sub>X</sub>	Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO <sub>X</sub> RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11); Consent Decree, 10/10/03
ES-4	EP-4	(Unit 4) Tangentially-fired natural gas boiler - Combustion Engineering – built1962, converted from coal firing in 2003.	2,350 million Btu/hr	Low-NO <sub>x</sub> burners	N/A	NO <sub>X</sub>	Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO <sub>X</sub> RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11); Consent Decree, 10/10/03
ES-5	EP-5	(Unit 5) Tangentially-fired oil boiler - Combustion Engineering – built 1975. Fired w/ No.6 fuel oil during normal operation; No. 2 fuel oil during ignition and flame stabilization.	8,500 million Btu/hr (860 million Btu/hr during flame stabilization.)	Multicyclone – Universal Oil Product	EC-5	PM, PM <sub>10</sub> , Pb, As, Co, Mn, Ni, Se	Permit to Construct & Operate, 2/7/73; Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO <sub>X</sub> RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00

ES-6	EP-6	(Unit 6) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-7	EP-7	(Unit 7) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-8	EP-8	(Unit 8) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-9	EP-9	(Unit 9) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-10	EP- 10	(Unit 10) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-11	EP- 11	(Unit 11) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00

EP- 13	(Unit 6A) Combined Cycle Combustion Turbine – General Electric Model PG7241 (FA) - fired w/natural gas or distillate fuel oil - built 2003	1,937 million Btu/hr on gas; 2,080 million Btu/hr on oil	Selective Catalytic Reduction (SCR)	SCR 6A	NO <sub>x</sub>	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 14	(Unit 6B) Combined Cycle Combustion Turbine – General Electric Model PG7241 (FA) - fired w/natural gas or distillate fuel oil – built 2003	1,937 million Btu/hr on gas; 2,080 million Btu/hr on oil	Selective Catalytic Reduction (SCR)	SCR 6B	NO <sub>X</sub>	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 13	Natural gas-fired duct burners installed in Unit 6A heat recovery steam generator downstream of the combustion turbine – built 2003.	385 million Btu/hr	Selective Catalytic Reduction (SCR)	SCR 6A	NO <sub>X</sub>	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 14	Natural gas-fired duct burners installed in Unit 6B heat recovery steam generator downstream of the combustion turbine – built 2003.	385 million Btu/hr	Selective Catalytic Reduction (SCR)	SCR 6B	NO <sub>X</sub>	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 17	Natural gas-fired gas pipeline heater – built 2003	11.85 million Btu/hr	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 18	Natural gas-fired gas pipeline heater – built 2003	17.37 million Btu/hr	None	_	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
EP- 19	Horizontally-fired gas auxiliary boiler – built 2003	99 million Btu/hr	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
	EP- 13 EP- 13 EP- 17 EP- 18 EP-	EP- 13	EP- 13	EP- 13	EP- Combustion Turbine – General Electric Model PG7241 (FA) - fired w/natural gas or distillate fuel oil - built 2003  EP- 14	EP- 13

ES-12a		Coal Handling - Railcar Unloading (car shaker)	600 tons/hr	Partial enclosure	-	РМ	None
ES-12b	•	Coal Handling – Crushing (coal crusher)	750 tons/hr	Double enclosure		PM	Minor NSR Permit to Modify and Operate, 9/18/98
ES-12c	awa .	Coal Handling – Conveying System	600 tons/hr	Enclosure	-	РМ	None
ES-12d	-	Coal Handling – Coal Pile	-	-	_	-	None

Petroleu	m Stora	ge Tanks					
ES-26	-	No. 2 Fuel Oil Storage Tank (constructed for Unit 6A & B combustion turbines)	2 million gallons	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11)
ES-27	-	No. 6 Fuel Oil Storage Tank	21 million gallons	None	-	-	-
ES-28	-	No. 6 Fuel Oil Storage Tank	21 million gallons	None	-	-	-
ES-29	••	No. 2 Fuel Oil Tank	1,015,000 gallons	None	~	-	-

<sup>&</sup>lt;sup>†</sup> The Size/Rated Capacity is not by itself an applicable requirement, but may be used to determine applicability of a requirement and may be used in calculations for applicable requirements.

#### III. Fuel Burning Equipment Requirements

#### UNITS 3 and 4 (ID#'s ES-3 and ES-4)

#### A. Limitations

- 1. VOC emissions from the Units 3 and 4 boilers shall be controlled by maintaining good combustion practices. Good combustion practices are defined as those combustion practices which are commonly recognized in the utility industry as essential to maintain optimal performance from utility boilers while operating in compliance with all emission limits, and include, but not limited to reasonable vigilance of the operating parameters and reasonable preventive maintenance of the boilers.
  - (9 VAC 5-80-490 B & C and Section E, Paragraph 5, of the 6/5/95 Consent Agreement)
- Nitrogen oxides (NOx) emissions from the Units 3 and 4 boilers shall be controlled by use of low NOx burners.
   (9 VAC 5-80-490 B & C, Condition 5 of 7/21/00 State Operating Permit, and Condition 5 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 3. The approved fuel for the Units 3 and 4 boilers is natural gas with a maximum sulfur content of 0.3 grains per 100 dry standard cubic feet. A change in the fuel may require a permit to modify and operate and compliance with the requirements of Paragraph 97 of the Consent Decree issued 10/10/03 (attached as Appendix C) . (9 VAC 5-80-490 B & C, Condition 18 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit, and Paragraphs 96 & 97 of the Consent Decree issued 10/10/03)
- 4. Emissions from the operation of the Unit 3 boiler shall not exceed the limits specified below, except that the short term limits do not apply for periods of start up, shutdown, or malfunction:

Pollutant	Short-term Limit	Annual Limit
Particulate Matter (PM)	0.10 lbs/million Btu <sup>† ††</sup> (9 VAC 5-40-900 A.2.c) <i>and</i> 115 lbs/hr x (actual fuel Btu's input per hour/1150 million Btu/hr), not to exceed 115 lbs/hr (9 VAC 5-40-900 B.1 & B.2, 9 VAC 5-40-920 and 9 VAC 5-40-10 B)	none
PM-10	None.	115 tons/yr for Units 3 & 4 combined *

Sulfur Dioxide	See Condition III.EE.1	14 tons/yr for Units 3 & 4 combined
Nitrogen Oxides (as NO <sub>2</sub> )	0.20 lbs/million Btu average per calendar day ††† (9 VAC 5-40-310, 9 VAC 5-40-311, and Condition 3 of the State Operating Permit issued 7/21/00 to implement NOX RACT.)	219 tons/yr (rolled daily) for Units 3 & 4 combined ** See Section IX. (Title IV Permit Allowances and Requirements).
Carbon Monoxide	27.3 lbs/hr <sup>†</sup> * 0.024 lbs/million Btu <sup>†</sup> *	363 tons/yr for Units 3 & 4 combined *
Volatile Organic Compounds	0.0054 lbs/million Btu <sup>†</sup> *	83 tons/yr for Units 3 & 4 combined *

- <sup>†</sup> Average for a three-hour sampling period.
- Technically, the heat input-based emission limit from 9 VAC 5-40-900 A applies to the entire fuel burning equipment installation (all fuel burning equipment units in operation prior to October 5, 1979), but the unit can only be in compliance with the unit-specific hourly emission limit from 9 VAC 5-40-900 B.2 if it also meets the heat input-based emission limit for the installation.
- The heat input-based NO<sub>X</sub> emission rate limit, which applies over the entire year, is less stringent than the limits given in Condition III. EE. 3, which apply to the months May through September and to the plant as a whole.
- \* From Condition 23 of the 10/05/01 (amended 11/18/02 and 12/8/04) PSD/Non-attainment Permit; complies with 9 VAC 5-50-260.
- From Paragraph 96 of the Consent Decree issued 10/10/03 (attached as Appendix C). Compliance is to be determined by adding the total NO<sub>X</sub> emissions from Units 3 and 4 on any given day to the total NO<sub>X</sub> emissions from those two units for the preceding 364 consecutive days Requirements on the permittee if compliance with this limit is not achieved are addressed at Paragraph 96 of the Consent Decree issued 10/10/03.

(9 VAC 5-80-490 B & C)

5. Emissions from the operation of the Unit 4 boiler shall not exceed the limits specified below, except that the short term limits do not apply for periods of start up, shutdown, or malfunction:

Pollutant	Short-term Limit	Annual Limit
Particulate Matter (PM)	0.10 lbs/million Btu <sup>† ††</sup> (9 VAC 5-40-900 A.2.c)  and 235 lbs/hr x (actual fuel Btu's input per hour/2350 million Btu/hr), not to exceed 235 lbs/hr (9 VAC 5-40-900 B.1 & B.2, 9 VAC 5-40-920 and 9 VAC 5-40-10 B)	none
PM-10	Same as PM above.	115 tons/yr for Units 3 & 4 combined *
Sulfur Dioxide	See Condition III.EE.1	14 tons/yr for Units 3 & 4 combined *
Nitrogen Oxides (as NO <sub>2</sub> )	0.20 lbs/million Btu average per calendar day ††† (9 VAC 5-40-310, 9 VAC 5-40-311, and Conditions 5 of the State Operating Permit issued 7/21/00 to implement NOX RACT.)	219 tons/yr (rolled daily) for Units 3 & 4 combined ** See Section IX. (Title IV Permit Allowances and Requirements).
Carbon Monoxide	55.7 lbs/hr <sup>†</sup> 0.024 lbs/million Btu <sup>†</sup> *	363 tons/yr for Units 3 & 4 combined *
Volatile Organic Compounds	0.0054 lbs/million Btu <sup>†</sup> *	83 tons/yr for Units 3 & 4 combined *

Average for a three-hour sampling period.

Technically, the heat input-based emission limit from 9 VAC 5-40-900 A applies to the entire fuel burning equipment installation (all fuel burning equipment units in operation prior to October 5, 1979), but the unit can only be in compliance with the unit-specific hourly emission limit from 9 VAC 5-40-900 B.2 it it also meets the heat input-based emission limit for the installation.

The heat input-based NO<sub>X</sub> emission rate limit, which applies over the entire year, is less stringent than the limits given in Condition III. EE. 3, which apply to the months May through September and to the plant as a whole.

<sup>\*</sup> From Condition 23 of the 10/05/01 (amended 11/18/02 and 12/8/04) PSD/Non-attainment Permit; complies with 9 VAC 5-50-260.

From Paragraph 96 of the Consent Decree issued 10/10/03 (attached as Appendix C). Compliance is to be determined by adding the total NO<sub>X</sub> emissions from Units 3 and 4 on any given day to the total NO<sub>X</sub> emissions from those two units for the preceding 364 consecutive days Requirements on the permittee if compliance with this limit is not achieved are addressed at Paragraph 96 of the Consent Decree issued 10/10/03.

(9 VAC 5-80-490 B & C)

- 6. For the purpose of applying the conditions of this permit, start up and shutdown of the Units 3 and 4 boilers occur only when the Units 3 and 4 generators are not supplying electrical power to the utility grid at a stable minimum load, determined during the 2003 break-in period to be 40 MW for Unit 3 and 80 MW for Unit 4. Periods when the boilers are being fired in a stand-by mode shall not be considered as periods of start up or shutdown.
  (9 VAC 5-80-490 B & C and Condition 9 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 7. Visible emissions from each of the Units 3 and 4 boiler stacks shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
  (9 VAC 5-80-490 B & C, and Condition 30 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE.

#### **B.** Monitoring

- The permittee shall measure and record sulfur dioxide (SO<sub>2</sub>) emissions from the Units 3 and 4 boilers by a method provided at 40 CFR 75.11(d), which includes the options of using a continuous emission monitoring system (CEMS) or methods described at 40 CFR 75 Appendix D for gas-fired units.
   (9 VAC 5-80-490 E; 9 VAC 5-80-420 B; 9 VAC 5-50-40; 9 VAC 5-40-1000; 40 CFR 72.9; 40 CFR 75.10; 40 CFR 75.19; and monitoring requirements at 40 CFR Part 75 for units subject to Acid Rain Program )
- Continuous emission monitoring systems (CEMS) shall be installed to measure and record nitrogen oxides (NO<sub>X</sub>, measured as NO<sub>2</sub>) emissions from the Units 3 and 4 boilers as lbs/mmBtu. The NO<sub>X</sub> and diluent CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements listed in 40 CFR 75.
  - (9 VAC 5-80-490 E; 9 VAC 5-80-420 B; 9 VAC 5-50-40; 9 VAC 5-40-1000; 40 CFR 72.9; 40 CFR 75.10; Condition 10 of 7/21/00 State Operating Permit; Condition 3, of 9/26/00 State Operating Permit; Condition 40 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit; and monitoring requirements at 40 CFR Part 75 for units subject to Acid Rain Program )

3. Continuous emission monitoring systems (CEMS) shall be installed to measure and record carbon monoxide (CO) emissions from the Units 3 and 4 boilers as lbs/mmBtu. The monitors shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 60 except as noted in condition III.B.5. For the purposes of this permit, data shall be reduced to 3-hour rolling averages. The CEMS data for CO emissions may be grounds for DEQ to request that a stack test be performed to prove compliance, especially, but not limited to a case in which the permittee has not taken corrective action when the data indicate that a non-compliance condition may exist. This condition does not exempt the permittee from other applicable state and federal monitoring requirements.

(9 VAC 5-80-490 E and Condition 40 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- The permittee shall determine carbon dioxide (CO<sub>2</sub>) emissions from the Units 3 and 4 boilers in accordance with a method provided in 40 CFR 75.
   (9 VAC 5-80-420 B, 40 CFR 72.9 and 40 CFR 75.10)
- 5. For the NO<sub>X</sub> and diluent CEMS the quality control requirements of 40 CFR Part 75 shall be met. The Quality Assurance Accuracy Specifications for CO CEMS shall be 40 CFR 60 Appendix F, Procedure 1. A linearity test for NO<sub>X</sub> and diluent, and a CGA for CO, shall be performed once per QA operating quarter (≥ 168 hours operation) not to exceed four calendar quarters. A RATA test shall be conducted once every four QA operating quarters (≥ 168 hours operation each), not to exceed eight calendar quarters. The provisions for a grace period to complete testing shall apply (40 CFR 75, Appendix B 2.2.4 & 2.3.3). Data validation shall be as defined in 40 CFR Part 75, Appendix B, 2.3.2 with the exception that missing data for CO, resulting from continuous monitor system breakdown, repair, calibration checks, and zero and span adjustments, shall be reported as monitor downtime and not substituted. No bias factor shall be applied to the CO monitored value as per 40 CFR Part 60.

(9 VAC 5-80-490 E and Condition 42 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

6. Visible Emissions Evaluation – At least once during each work shift, the permittee shall have someone visually observe the stacks of the Units 3 and 4 boilers for visible emissions when operating. If the observer sees an abnormally opaque flue gas plume, the permittee shall have a certified smoke reader conduct within 4 hours, or as soon thereafter as weather and lighting conditions permit, a 40 CFR Part 60, Method 9 visible emissions evaluation of the plume for a minimum of 12 minutes. An abnormally opaque flue gas plume is one that is obviously more opaque than the plume was at the time the plume was initially determined to be in compliance with the applicable visible emissions limit of the PSD/Non-attainment permit issued 10/05/01(amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11). When light or weather conditions do not allow for visible observations for an entire shift, a visible emission observation need not be recorded for that shift, so long as this circumstance and the start and end time of the shift are noted in the log. In lieu of a once per shift observation for any particular stack, the permittee may install and operate a continuous opacity monitor that meets the design specifications of 40 CFR Part 60,

Appendix B and is calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.13 and Appendix B or DEQ approved procedures that are equivalent to the requirements of 40 CFR 60.13 and Appendix B. If continuous opacity monitor(s) are installed and operated, they shall be used only to indicate the need for a Method 9 visible emissions evaluation.

(9 VAC 5-80-490 E, 9 VAC 5-50-80, 9 VAC 5-50-260, and Condition 51 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

#### C. Recordkeeping

- The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon with the DEQ Northern Regional Office (NRO) Air Compliance Manager. These records shall include, but are not limited to:
  - a. Annual throughput of natural gas to the Units 3 and 4 boilers, calculated monthly as the total for the most recent twelve complete calendar months.
  - b. Monthly emissions calculations for PM, PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, and VOC from the Units 3 and 4 stacks using calculation methods approved by the NRO Air Compliance Manager to verify compliance with the lb/hr, ton/yr, and lbs/mmBtu emissions limitations in Conditions III. A. 4 and 5.
  - c. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions.
  - d. Results of the flue gas plume observations required each shift and the time and lighting conditions when the observations were conducted.
  - e. Results of all stack tests, visible emission evaluations and CEMS performance evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 F and Condition 38 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 2. All monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all electronically recorded raw data for continuous monitoring instrumentation, and copies of all reports required by this permit. (9 VAC 5-80-490 F.)
- 3. The permittee shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of these units, any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring

system or monitoring device is inoperative. (9 VAC 5-80-490 F and 9 VAC 5-40-50 B)

#### D. Testing

- The permitted facility (stacks from the combustion turbines, auxiliary boilers, and Units 3 and 4 boilers) shall be maintained so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods.
   (9 VAC 5-50-30 F, 9 VAC 5-80-490 E & F, and Condition 52 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 2. No less than once per every five calendar years, performance testing shall be conducted for total volatile organic compounds (VOC) emissions from the Units 3 and 4 boilers, using EPA Method 25 or equivalent methods approved by the NRO Air Compliance Manager. The performance test shall be used to determine compliance with the emission limits contained in Conditions III.A.4 and 5 above. The first such test for each boiler shall be conducted within 24 months of the effective date of this permit or the term. Testing for one boiler does not need to be during the same year or at the same time of year as for the other boiler, but it may be. Testing shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the NRO Air Compliance Manager. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Air Compliance Manager within 60 days after each test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-30 and 9 VAC 490 E)

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent methods approved by the NRO Air Compliance Manager in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 25
NOx	EPA Method 7
SO2	EPA Method 6
CO	EPA Method 10
PM/PM10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-490 E)

#### E. Reporting

- 1. The permittee shall submit written reports to the NRO Air Compliance Manager of excess emissions from any process monitored by a continuous monitoring system (CMS) on a quarterly basis, postmarked no later than the 30<sup>th</sup> day following the end of each calendar quarter. These reports shall include, but are not limited to the following information:
  - a. The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
  - Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the source; the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
  - The date and time identifying each period during which the continuous monitoring system was inoperative, except for the zero and span checks and the nature of the system repairs or adjustments; and,
  - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

(9 VAC 5-80-490 E, 9 VAC 5-50-50 and Condition 43 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit))

2. Data collected from the NO<sub>X</sub> CEMS for determining compliance with the RACT limit of 0.20 lb/mmBtu in Conditions III.A. 4 and 5 shall be processed in accordance with the requirements of 40 CFR Part 60. A report presenting the results of the monitoring shall be periodically submitted to the NRO Air Compliance Manager. The details of the monitoring, recordkeeping and reporting shall be as proposed in the letter dated September 29, 2000, from Martin L. Bowling, Jr. of Dominion to Alice G. Nelson of DEQ. A copy of that letter is attached as Appendix B. This condition does not preclude other applicable reporting requirements.
(9 VAC 5-80-490 and Condition 10 of 7/21/00 State Operating Permit)

Note: Additional reporting requirements for these units are included in Section IX. (Title IV Permit Allowances and Requirements.)

#### **UNIT 5 (ID# ES-5)**

#### F. Limitations

- Particulate emissions from the Unit 5 boiler shall continue to be controlled by the use of a multicyclone or control device of at least equivalent efficiency.
   VAC 5-80-490 B & C, 9 VAC 5-40-900, and 9 VAC 5-80-1110 C.)
- 2. VOC emissions from the Unit 5 boiler shall be controlled by maintaining good combustion practices. Good combustion practices are defined as those combustion practices which are commonly recognized in the utility industry as essential to maintain optimal performance from utility boilers while operating in compliance with all emission limits, and include, but not limited to reasonable vigilance of the operating parameters and reasonable preventive maintenance of the boilers. (9 VAC 5-80-490 B & C and Section E, Paragraph 5, of the 6/12/95 Consent Agreement)
- Nitrogen oxides (NOx) emissions from the Unit 5 boiler shall be controlled by use of tangential firing, separate overfire air, and flue gas recirculation.
   (9 VAC 5-80-490 B & C, 9 VAC 5-40-310 and Condition 7 of the 7/21/00 State Operating Permit)
- The approved fuel for the Unit 5 boiler is fuel oil. A change in the fuel may require a permit to modify and operate.
   (9 VAC 5-80-490 B & C, and the opening paragraph of the 2/7/73 Permit to Construct & Operate)
- 5. Emissions from the operation of the Unit 5 boiler shall not exceed the limits specified below:

Pollutant	Short-term Limit	Annual Limit
Particulate Matter (PM)	0.10 lbs/million Btu <sup>†</sup> (9 VAC 5-50-410 Subpart D and 40 CFR 60.42(a)(1)) and 850 lbs/hr x (actual fuel Btu's input per hour/8500 x 10 <sup>6</sup> Btu/hr), not to exceed 850 lbs/hr (9 VAC 5-40-900 B.1 & B.2, 9 VAC 5-40-920 and 9 VAC 5-40-10 B)	none
PM-10	none	none
Sulfur Dioxide	0.80 lbs/million Btu <sup>†</sup> (9 VAC 5-50-410 Subpart D and 40 CFR 60.43(a)(1))	See Section IX. (Title IV Permit Allowances and Requirements.).

Nitrogen Oxides (as NO <sub>2</sub> )	0.30 lbs/million Btu <sup>†</sup> (9 VAC 5-50-410 Subpart D and 40 CFR 60.44(a)(2)) and 0.25 lbs/million Btu 30-day rolling average calculated daily <sup>††</sup> (9 VAC 5-40-310, 9 VAC 5-40-311, and Condition 7 of the 7/21/00 State Operating Permit to implement NO <sub>X</sub> RACT.)	See Section IX. (Title IV Permit Allowances and Requirements).
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Average for a three-hour sampling period when operating at rated capacity.

The heat input-based NO<sub>X</sub> emission rate limit above, which applies over the entire year, is less stringent than the limits given in Condition III. EE. 3, which apply to the months May through September and to the plant as a whole.

(9 VAC 5-80-490 B & C)

6. Visible emissions from the Unit 5 boiler stack(s) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-410 and 9 VAC 5-80-490 B & C)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE.

#### G. Monitoring

- The permittee shall measure and record sulfur dioxide (SO<sub>2</sub>) emissions from the unit 5 boiler by a method provided at 40 CFR 75.11(d), which includes the options of using a continuous emission monitoring system (CEMS) or methods described at 40 CFR 75 Appendix D for oil-fired units.
   (9 VAC 5-80-490 E; 9 VAC 5-80-420 B; 9 VAC 5-50-40; 9 VAC 5-40-1000; 40 CFR 72.9; 40 CFR 75.10; 40 CFR 75.19; and monitoring requirements at 40 CFR Part 75 for units subject to Acid Rain Program )
- record nitrogen oxides emissions. The monitor shall be installed, calibrated, maintained, audited and operated in accordance with the requirements listed in 40 CFR 75.

  (9 VAC 5-40-40; 9 VAC 5-40-1000; 40 CFR 72.9; 40 CFR 75.10; Condition 10 of 7/21/00 State Operating Permit; Condition 3, of 9/26/00 State Operating Permit; and monitoring requirements at 40 CFR Part 75 for units subject to Acid Rain Program)

2. A continuous emission monitor system (CEMS) shall be installed to measure and

The permittee shall determine carbon dioxide (CO<sub>2</sub>) emissions from the Unit 5 boiler in accordance with a method provided in 40 CFR 75.
 (9 VAC 5-80-420 B, 40 CFR 72.9 and 40 CFR 75.10)

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 16

4. A continuous opacity monitoring system (COMS) shall be installed to measure and record opacity. The monitor shall be installed, calibrated, maintained, audited and operated in accordance with the requirements listed in 40 CFR 60 and 40 CFR 75.10 (d).

(9 VAC 5-80-490 E, 9 VAC 5-80-420 B, 9 VAC 5-40-40, 9 VAC 5-40-1000, 40 CFR 72.9, and 40 CFR 75.10)

#### H. Recordkeeping

- The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon with the NRO Air Compliance Manager. These records shall include, but are not limited to:
  - a. Monthly and annual (most recent twelve months) throughput of residual and distillate oil to the Unit 5 boiler, determined monthly from electronically measured changes in the level of the fuel in the fuel storage tanks, measured with a precision of at least to the nearest millimeter, and taking into account known additions and other factors such as temperature that may affect the level.
  - b. All fuels supplier certifications
  - c. Monthly emissions calculations for PM, sulfur dioxide, and nitrogen oxides from the Unit 5 stack using calculation methods approved by the NRO Air Compliance Manager to verify compliance with the lb/hr, ton/yr, and lbs/mmBtu emissions limitations in Condition III. F.5.
  - d. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions.
  - e. Results of all stack tests, visible emission evaluations and CEMS performance evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 F and 9 VAC 5-50-50)

- The permittee shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of these units, any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
   (9 VAC 5-50-50 B and 9 VAC 5-80-490 F)
- 3. The permittee shall obtain a certification from the fuel supplier with each shipment of residual fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the residual fuel oil was received;
  - c. The volume of residual fuel oil delivered in the shipment;
  - d. The sulfur content of the oil.

(9 VAC 5-80-490 F)

- 4. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the distillate fuel oil was received;
  - c. The volume of distillate fuel oil delivered in the shipment;
  - d. The sulfur content of the oil.

(9 VAC 5-80-490 F)

#### I. Testing

- 1. No less than once per every five calendar years, performance testing shall be conducted for particulate emissions from Unit #5, using EPA Methods 5 or 17 or equivalent methods approved by the NRO Air Compliance Manager. The performance test shall be used to determine compliance with the emission limits contained in Condition III.F.5 above. The first such test shall be performed within 24 months of the issuance of this permit. Testing shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the NRO Air Compliance Manager. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the NRO Air Compliance Manager within 60 days after each test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490 E and 9 VAC 5-50-30)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NOx	EPA Method 7
SO2	EPA Method 6
PM	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-490 E)

#### J. Reporting

1. The permittee shall submit written reports to the NRO Air Compliance Manager of excess emissions from any process monitored by a continuous monitoring system (CMS) on a quarterly basis, postmarked no later than the 30<sup>th</sup> day following the end

of each calendar quarter. These reports shall include, but are not limited to the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- The date and time identifying each period during which the continuous monitoring system was inoperative, except for the zero and span checks and the nature of the system repairs or adjustments; and,
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

This condition does not apply to the continuous emissions monitoring system for sulfur dioxide on Unit 5 if the permittee is utilizing another method to demonstrate compliance with the sulfur dioxide limit in Condition III.F.5. in accordance with this permit.

(9 VAC 5-80-490 F and 9 VAC 5-50-50)

2. Data collected from the NO<sub>x</sub> CEMS for determining compliance with the RACT limit of 0.25 lb/mmBtu in Condition III.F.5 shall be processed in accordance with the requirements of 40 CFR Part 60. A report presenting the results of the monitoring shall be periodically submitted to the NRO Air Compliance Manager. The details of the monitoring, recordkeeping and reporting shall be as proposed in the letter dated September 29, 2000, from Martin L. Bowling, Jr. of Dominion to Alice G. Nelson of DEQ. A copy of that letter is attached as Appendix B. This condition does not preclude other applicable reporting requirements.
(9 VAC 5-80-490 and Condition 10 of 7/21/00 State Operating Permit)

Note: Additional reporting requirements for this unit are included in the attached Acid Rain Permit.

#### UNITS 6, 7, 8, 9, 10 & 11 (ID#'s ES-6, 7, 8, 9, 10 and 11)

Note: This section does not apply to Units 6A and 6B, which are different than the Unit#6 that is one of the six small peaking units covered in this section.

#### K. Limitations

1. Emissions from the operation of the Units #6, 7, 8, 9, 10, and 11 combustion turbines shall not exceed the limits specified below for each unit:

Pollutant	Short-term Limit	Annual Limit
Particulate Matter (PM)	0.10 lbs/million Btu <sup>†</sup> (9 VAC 5-40-900 A.2.c) and 24.5 lbs/hr x (actual fuel Btu's input per hour/245 million Btu/hr) <sup>†</sup> (9 VAC 5-40-900 B.1 & B.2 and 9 VAC 5-40-920)	none
Sulfur Dioxide	See Condition III.EE.1	none
Nitrogen Oxides (as NO <sub>2</sub> )	See Condition III.EE.3	none

<sup>&</sup>lt;sup>†</sup> Average for a three-hour sampling period.

(9 VAC 5-80-490 B & C)

 Visible emissions from each of the six turbine stack(s) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. This condition applies at all times except startup, shutdown, and malfunction.
 (9 VAC 5-40-940, 9 VAC 5-40-20 A.4, and 9 VAC 5-80-490 B & C)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE.

#### L. Monitoring

1. The permittee shall perform visible emissions observations (VEO's) on the exhaust stack of each combustion turbine (Units #6, 7, 8, 9, 10, and 11) according to the following operating time-dependent schedule:

Page 20

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

	Operating Time	Observation Frequency
a.	hours operated < 20 hrs/yr	no observation required
b.	20 hrs/yr < hours operated < 200hrs/yr	once per year
C.	hours operated > 200 hrs/yr	once every 200 hours

The VEO's shall be conducted using 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least two minutes to determine if there are any visible emissions, unless the unit is monitored by a 40 CFR 60 Appendix A continuous opacity monitor. Each emissions unit in the Method 22 technique observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least 3 six minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-490 E and 9 VAC 5-40-20)

2. The permittee shall sample and test the distillate oil in the distillate oil storage tank for sulfur content after each shipment of distillate oil. Dominion defines a shipment as a series of truck transport loads or barge transfer from any source or other vendor. Distillate oil sulfur content shall be determined using ASTM D2880-78 or another approved ASTM method incorporated in 40 CFR 60 by reference. (9 VAC 5-40-50 and 9 VAC 5-80-110)

#### M. Recordkeeping

- The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with NRO Air Compliance Manager. These records shall include, but are not limited to:
  - a. All distillate fuel analyses
  - b. Results of all stack tests and visible emissions evaluations and visible emissions observations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years (9 VAC 5-80-490 F)

2. The permittee shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of these units, any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring

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system or monitoring device is inoperative. (9 VAC 5-40-50 B and 9 VAC 5-80-490 F)

#### N. Testing

- 1. During each five year term of this permit, performance testing shall be conducted for particulate matter (PM) emissions from Units 6, 7, 8, 9, 10 and 11, as prescribed by this condition, using EPA Methods 5 or 17 or equivalent methods approved by the NRO Air Compliance Manager. Testing shall be conducted and reported and data reduced as set forth in 9 VAC 5-40-30. The details of the tests are to be arranged with the Air Compliance Manager. The permittee shall submit a test protocol at least 30 days prior to testing. The term operation in the following exceptions and qualifications means when fuel is combusted in the unit, which includes periods of start up and shutdown. For the purpose of complying with this condition only, the following exceptions and qualifications shall apply.
  - a. If during each calendar year of the permit term no individual unit exceeds 87 total hours of operation (including start up and shut down), no performance testing shall be required;
  - b. If within a calendar year any one unit exceeds 87 total hours of operation, that same unit shall be tested within 12 months of surpassing 87 hours of operation that year, but shall not be required to be tested again during the term of the permit, except to demonstrate compliance following corrective action taken as a consequence of the first test failing to demonstrate compliance;
  - c. If during the permit term a second unit exceeds 87 total hours of operation in any calendar year, but not necessarily the same calendar year as the first unit, the second unit to operate 87 hours in a calendar year shall be tested as outlined in the introduction to this condition within 12 months of surpassing 87 hours of operation that year;
  - d. If during any calendar year of the permit term the sum of the hours of operation of each of Units 6, 7, 8, 9, 10 and 11 combined exceeds 522 and fewer than two of the units have already been tested during the permit term, the two units most frequently operated that year shall be tested within 12 months of the combined hours of operation surpassing 522, except that the results of a unit that has already been tested during the permit term may be substituted for the testing of one of the two that would otherwise be tested;
  - e. If either the first or second unit performance tested for PM emissions during the permit term (before corrective action) had test results averaging greater than 85 percent of any PM limit in Condition III.K.1, all of the untested units shall also undergo performance testing for PM during the term of the permit, regardless of their hours of operation, except for any unit that the permittee agrees to permanently shut down. For the purpose of demonstrating compliance with the PM Limits in Condition III.K.1 the performance tests would be compared to 100 % of the PM limit:

- f. If untested units must be tested during the remaining permit term, because a tested unit had test results averaging greater than 85 percent of any PM limit in Condition III.K.1., at least one of the untested units shall be tested within 12 months of completion of the testing that showed emissions greater than 85 percent of a PM limit, and the remaining untested units may be tested any time before the end of the permit term;
- g. The permittee shall conduct a Method 9 visual emission evaluation (VEE) concurrent with the performance testing for PM emissions on units being tested for the purpose of satisfying requirements of this permit condition:
- h. For the purpose of complying with this condition, the term of the permit is presumed to be five years and if for some reason the permit term is extended due to failure of the renewal to be timely or for other reasons, the requirements of this condition still must be fulfilled as if the permit were to expire after a term of five years, except that any requirement that must be fulfilled within a 12-month period that would not end prior to the end of the five-year permit term, may be completed after the five-year permit term has ended, so long as it is done within the 12-month period required;
- i. To the extent that this condition allows for requirements to be completed after the end of the term of the permit, those requirements shall still be considered to be enforceable, even if a new or renewed permit does not require them, unless the new or renewed permit explicitly dismisses compliance with the prior requirements;
- j. No part of this condition is presumed to apply to other conditions that may be established for specific size particulate matter other than as defined by 9 VAC 5-10-20 as "particulate matter."
- k. If during the term of this permit the restoration of the electric grid becomes necessary, Units 6, 7, 8, 9, 10 and 11 (or a combination of any or all of these units) shall be allowed to temporarily operate in a black-start mode of operation. Hours of operation during a black-start event may be exempted, as specified in Condition VIII.CC of this permit, and may not count against the 87 hours of operation in Condition III.N.1.a. A black start event is considered to end once the permittee receives notification from the system operator that the power grid has been restored. During black-start operation of Units 6, 7, 8, 9, 10 and 11 (or any combination thereof) the permittee shall to the maximum extent practicable minimize operation of these units.

(9 VAC 5-40-30 and 9 VAC 5-80-490 E & F)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent methods approved by the NRO Air Compliance Manager in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NOx	EPA Method 7E, 20
SO2	EPA Method 20
PM/PM10	EPA Methods 5, 17, 201A, 202
Visible Emission	EPA Method 9

(9 VAC 5-80-490 E)

#### O. Reporting

 Within 60 days following each calendar year, the permittee shall submit to the NRO Air Compliance Manager a written report of the number of hours and at what capacity factor that Units 6, 7, 8, 9, 10 and 11 each operated during the calendar year.

(9 VAC 5-80-490 F and 9 VAC 5-40-7430 B.3.a)

- 2. If performance testing is conducted to determine compliance with emissions limits of this permit, two copies of the test results shall be submitted to the NRO Air Compliance Manager within 60 days after each test completion and shall conform to the test report format enclosed with this permit. If the testing is conducted to comply with requirements of Condition III.N.1, copies of any previous test results conducted to comply with requirements of Condition III.N.1 shall be attached to the copies of the new test results.
  (9 VAC 5-80-490 E)
- 3. No later than 30 days following the end of a black start outlined by Condition III.N.1, the permittee shall submit to the NRO Air Compliance Manager a written report that contains the following information:
  - a. The date and time of the start and end of the black start operation.
  - b. A brief description, including documentation from the system operator, of the suspected cause of the system outage that necessitated the black start operation of these units.

(9 VAC 5-80-490 E)

#### UNITS 6A & 6B (ID#'s ES-13&14)/ASSOCIATED DUCT BURNERS (ID#'s ES-15&16)

#### P. Limitations

- 1. Nitrogen oxides (NO<sub>X</sub>) emissions from the Units 6A and 6B combustion turbines shall be controlled by "dry/low-NO<sub>X</sub>" combustion when firing natural gas and by water injection when firing distillate fuel oil. The nitrogen oxides in the exhaust of the combustion turbines, downstream of the duct burners, shall be controlled by selective catalytic reduction (SCR) with ammonia injection. The SCR equipment shall be provided with adequate access for inspection. The SCR shall be in operation when the turbines are operating, except when operation of the SCR would occur under conditions outside of those recommended by the SCR system vendor, including, but not limited to, when emissions of ammonia would be excessive. (9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 3 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 2. The approved fuels for Units 6A and 6B combustion turbines are natural gas (includes liquefied natural gas) with a maximum sulfur content of 0.3 grains per 100 dry standard cubic feet and distillate fuel oil with a maximum sulfur content of 0.05 percent by weight. A change in the fuel may require a permit to modify and operate.
  (9 VAC 5-80-490 B & C, Condition 14 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit and 40 CFR 60.333)
- 3. The approved fuels for Units 6A and 6B duct burners are natural gas (includes liquefied natural gas) with a maximum sulfur content of 0.3 grains per 100 dry standard cubic feet. A change in the fuel may require a permit to modify and operate.
  (9 VAC 5-80-490 B & C and Condition 15 of the 10/05/01 (amended 11/18/02,

12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 4. The Units 6A and 6B combustion turbines in combination shall consume no more than 14.1 million gallons of distillate fuel oil per year and no more than 30,838 million cubic feet of natural gas per year. Compliance with these limits shall be determined monthly as the total for the most recent twelve complete calendar months. (9 VAC 5-80-490 B & C and Condition 10 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 5. The two duct burners in combination shall not consume more than 1,520 million cubic feet of natural gas per year and shall operate only when the Units 6A and 6B turbines are firing natural gas. Compliance with these limitations shall be determined monthly as the total for the most recent twelve complete calendar months.
  - (9 VAC 5-80-490 B & C and Condition 11 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 6. Stack emissions from the operation of the Units 6A and 6B combustion turbines and associated duct burners (DB's) shall not exceed the limits specified below, except

that the short term limits do not apply for periods of start up, shutdown, or malfunction:

Pollutant	Short-term Limit (each unit)			Annual Limit (units combined)
		Natural Gas	Fuel Oil	
PM-10	DB's Off	18.3 lbs/hr <sup>†</sup> - 8	53.1 lbs/hr <sup>†</sup>	185 tons/yr <sup>†</sup>
	DB's On	22.2 lbs/hr <sup>†</sup>	NA	
Sulfur	DB's Off	1.74 lbs/hr <sup>††</sup>	98.9 lbs/hr <sup>††</sup>	59.7 tons/yr <sup>††</sup>
Dioxide	DB's On	2.08 lbs/hr ††	NA	
Nitrogen	DB's Off	3.5 ppmvd <sup>†</sup>	22 ppmvd <sup>†</sup>	285 tons/yr ††
Oxides (as NO <sub>2</sub> )	DB's On	3.5 ppmvd <sup>†</sup>	NA	
	During start up, shutdown, and malfunction the limit defaults to 40 CFR 60.332.			
Carbon Monoxide	DB's Off	32 lbs/hr <sup>†</sup> 7 9 ppmvd <sup>†</sup> 3	9 lbs/hr <sup>†</sup> 38 ppmvd <sup>†</sup>	336 tons/yr <sup>†</sup>
	DB's On	63 lbs/hr <sup>†</sup> 19.3 ppmvd <sup>†</sup>	NA 	
Volatile Organic Compounds	DB's Off	1.2 ppmvd †††	2.6 ppmvd †††	34.6 tons/yr <sup>††</sup>
	DB's On	2.3 ppmvd <sup>†††</sup>	NA	
Formal- dehyde	DB's Off	6.2 x 10 <sup>-4</sup> lbs/mmBtu <sup>†††</sup>	<sup>†</sup> 2.8 x 10 <sup>-4</sup> lbs/mmBtu <sup>††††</sup>	9.8 tons/yr <sup>††</sup>
	DB's On	6.2 x 10 <sup>-4</sup> lbs/mmBtu <sup>†††</sup>	<sup>†</sup> NA	

NA = Not Applicable; the duct burners do not operate when combustion turbines fire fuel oil.

ppmvd = parts per million by volume on a dry gas basis

All concentration limits are at 15 percent O<sub>2</sub>.

All concentration and hourly emission limits represent averages for a three-hour sampling period, except for the  $NO_X$  limits when compliance is determined by continuous emissions monitors, in which case rolling averages are calculated hourly for the most recent eight hours of operation.

These emissions are derived from the estimated overall emission contribution

from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits.

- † (9 VAC 5-50-280) †† (9 VAC 5-50-260) ††† (9 VAC 5-50-270) †††† (9 VAC 5-60-320)
- (9 VAC 5-80-490 B & C and Condition 21 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 7. For the purpose of applying the conditions of this permit, start up and shut down of the GE 7FA combustion turbines are defined in Appendix A, except as follows.

For the purpose of applying the NOx conditions of this permit, start up of the GE 7FA combustion turbines is defined as given in Appendix A plus any additional time required for the temperature of the catalyst bed in the selective catalytic reduction (SCR) unit to reach 550 °F, the minimum temperature at which the SCR vendor has determined that the SCR can be expected to continuously meet the design efficiency.

For the purpose of applying the NOx conditions of this permit, shut down of the GE 7FA combustion turbines is defined as given in Appendix A plus each period when the temperature of the catalyst bed in the selective catalytic reduction unit falls below the temperature used to determine "start up" and during which the temperature does not return to the start up temperature prior to the turbine temporarily ceasing to operate.

(9 VAC 5-80-490 B & C and Condition 9 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

8. For each Unit 6A and 6B stack, emissions from the operation of the duct burners shall not exceed the limits specified below, except that the short term limits do not apply for periods of start up, shutdown, or malfunction:

Pollutant	Short-term Limit	Annual Limit
Particulate Matter (PM)	0.03 lbs/million Btu <sup>†</sup>	none
Sulfur Dioxide	0.20 lbs/million Btu <sup>†</sup>	none
Nitrogen Oxides (as NO <sub>2</sub> )	0.20 lbs/million Btu <sup>†</sup> and 1.6 lbs/megawatt-hour, gross energy out <sup>†</sup>	none

Carbon Monoxide	0.20 lbs/million Btu <sup>†</sup>	none
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(9 VAC 5-80-490 B & C, 9 VAC 5-50-410 (Subpart Da) and Condition 22 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- For the purpose of applying the conditions of this permit, the duct burners shall be considered to be in a period of start up or shutdown only when the rate of fuel input is in a period of identifiable and continuous fluctuation immediately following the start or immediately prior to the termination of a period of operation.
   (9 VAC 5-80-490 B & C and Condition 9 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 10. Visible emissions from each of the Units 6A and 6B stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity as determined by the EPA Method 9 (reference 40 CFR, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction (9 VAC 5-50-410, 9 VAC 5-80-490 B & C, and Condition 29 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 11. Except where this permit is more restrictive than the applicable requirement, the Units 6A and 6B combustion turbines shall be operated in compliance with the current requirements of 40 CFR 60, Subpart GG. Exceptions include, but are not limited to:
  - a. The permittee need not monitor the water-to-fuel ratio as required at §60.334(a), so long as the NOX continuous emissions monitoring data availability is no less than 95 percent on a quarterly basis. (This waiver is authorized by the determination memorandum issued by John B. Rasnic, Stationary Source Compliance Div., OAQPS, U.S. EPA, on March 12, 1993, titled "NSPS Subpart GG, Alternative Method," Applicability Determination Index Control Number 9400024)
  - b. The daily monitoring of the fuel sulfur content required by §60.334(b) for natural gas may be replaced with procedures from 40 CFR Part 75, Appendix D, if:
    - i) the permittee obtains an approved Phase-II Acid Rain permit for each unit;
    - ii) the permittee submits a monitoring plan that commits to using pipeline quality natural gas as the primary fuel for the two combustion turbines, and this monitoring plan is signed by the designated representative for the units;
    - iii) the permittee uses one of the options in Section 2.3.1.4 of 40 CFR Part 75, Appendix D to verify that the fuel burned in the combustion turbines qualifies to be classified as pipeline natural gas; and,

Compliance shall be determined on a 30-day rolling average basis.

iv) only so long as pipeline quality natural gas is the primary fuel.

(This waiver is authorized by the determination issued by R. Douglas Neeley, Region 4, U.S. EPA, on March 29, 2000, titled "Alternative Testing and Monitoring for Combined Cycle System," Applicability Determination Index Control Number 0000031)

- c. The daily monitoring of the fuel nitrogen content (for natural gas only) required by §60.334(b) is waived for natural gas. (This waiver is authorized by the determination issued by R. Douglas Neeley, Region 4, U.S. EPA, on March 29, 2000, titled "Alternative Testing and Monitoring for Combined Cycle System," Applicability Determination Index Control Number 0000031)
- d. The GE injection control algorithm described in the U.S. EPA memorandum, dated June 2, 1997, and attached to this permit may be used in lieu of the Subpart GG ISO correction equation, so long as the conditions stated in the memorandum are met.
  (This waiver is authorized by the U.S. EPA memorandum from Bruce Jordan, Emission Standards Division, OAQPS, and John Rasnic, Manufacturing, Energy and Transportation Division, OAQPS, to EPA Regional Offices, dated June 2, 1997)
  - (9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 31 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 12. Except where this permit is more restrictive than the applicable requirement, the Units 6A and 6B duct burners shall be operated in compliance with the current requirements of 40 CFR 60, Subpart Da. (9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 32 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE

#### Q. Monitoring

1. Continuous Emission Monitoring Systems, meeting the design specifications of 40 CFR Part 75, shall be installed to measure and record the emissions of nitrogen oxides (NO<sub>X</sub>, measured as NO<sub>2</sub>) as ppmvd corrected to 15% O<sub>2</sub>, from the combination of each GE 7FA combustion turbine and its duct burners. The CEMS shall also measure and record the percent of oxygen in the exhaust stream. The NOx and diluent CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 75. For the purposes of this permit, data shall be reduced to 8-hour rolling averages for NO<sub>X</sub>. (9 VAC 5-50-40, 9 VAC 5-80-420, 9 VAC 5-80-490 E, and Condition 39 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 2. Continuous Emission Monitoring Systems, meeting the design specifications of 40 CFR Part 75, shall be installed to measure and record the emissions of carbon monoxide, as ppmvd corrected to 15% O<sub>2</sub>, from the combination of each GE 7FA combustion turbine and its duct burners. The CEMS shall also measure and record the percent of oxygen in the exhaust stream. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 60 except as noted in condition III.Q.3. For the purposes of this permit, data shall be reduced to 3-hour rolling averages for carbon monoxide. The CEMS data for CO emissions may be grounds for DEQ to request that a stack test be performed to prove compliance, especially, but not limited to a case in which the permittee has not taken corrective action when the data indicate that a non-compliance condition may exist.
  - (9 VAC 5-50-40 and 9 VAC 5-80-420, 9 VAC 5-80-490 E, and Condition 39 of the 10/05/01 (amended 11/18/02, 12/8/04 and 7/11/08) PSD/Non-attainment Permit)
- 3. For the NO<sub>x</sub> and diluent CEMS the quality control requirements of 40 CFR Part 75 shall be met. The Quality Assurance Accuracy Specifications for CO CEMS shall be 40 CFR 60 Appendix F, Procedure 1. A linearity test for NOx and diluent, and a CGA for CO, shall be performed once per QA operating quarter (≥ 168 hours operation) not to exceed four calendar quarters. A RATA test shall be conducted once every four QA operating quarters (≥ 168 hours operation each), not to exceed eight calendar quarters. The provisions for a grace period to complete testing shall apply (40 CFR 75, Appendix B 2.2.4 & 2.3.3). Data validation shall be as defined in 40 CFR Part 75, Appendix B, 2.3.2 with the exception that missing data for CO, resulting from continuous monitor system breakdown, repair, calibration checks, and zero and span adjustments, shall be reported as monitor downtime and not substituted. No bias factor shall be applied to the CO monitored value as per 40 CFR Part 60. (Condition 42 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 4. At least once during each work shift the permittee shall have someone visually observe the stacks of the GE 7FA combustion turbines for visible emissions when they are operating. If the observer sees an abnormally opaque flue gas plume, the permittee shall have a certified smoke reader conduct within 4 hours, or as soon thereafter as weather and lighting conditions permit, a 40 CFR Part 60, Method 9 visible emissions evaluation of the plume for a minimum of 12 minutes. An abnormally opaque flue gas plume is one that is obviously more opaque than the plume was at the time the plume was initially determined to be in compliance with with the applicable visible emissions limit of the PSD/Non-attainment permit issued 10/05/01(amended 11/18/02, 12/8/04, 7/11/08, and 5/20/11). When light or weather conditions do not allow for visible observations for an entire shift, a visible emission observation need not be recorded for that shift, so long as this circumstance and the start and end time of the shift are noted in the log. In lieu of a once per shift observation for any particular stack, the permittee may install and operate a continuous opacity monitor that meets the design specifications of 40 CFR Part 60, Appendix B and is calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.13 and Appendix B or DEQ approved procedures that are equivalent to the requirements of 40 CFR 60.13 and Appendix B. If continuous opacity monitor(s) are installed and operated, they shall be used only to indicate the

need for a Method 9 visible emissions evaluation. (9 VAC 5-50-80, 9 VAC 5-50-280, and Condition 51 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- Compliance with the nitrogen oxides limits of Condition III.P.8 shall be determined by methods in 40 CFR 60.48a (j) and (k) for "an affected duct burner used in combined cycle systems" or by an alternate method approved by the NRO Air Compliance Manager.
  - (9 VAC 5-50-410 (Subpart Da))
- 6. The GE 7FA combustion turbines shall be equipped with devices to continuously monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine when water injection is being used to control NO<sub>X</sub> emissions. This system shall be accurate to within ±5.0 percent and shall be as approved by the NRO Air Compliance Manager. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the GE 7FA combustion turbines are operating.

(9 VAC 5-50-260, 9 VAC 5-50-410 (Subpart GG), and Condition 7 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Note: Although the combustion turbines must be equipped with water-to-fuel ratio monitoring devices per this condition, Condition III.P. 11. a. provides circumstances under which determining the ratio is not required.

7. The Permittee shall use the NO<sub>X</sub> CEMS required at Condition Q.1. of this permit to satisfy the requirements of 40 CFR Part 64 "Compliance Assurance Monitoring" applicable to these units.

(9 VAC 490 E and 40 CFR 64.3(b))

## R. Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - b. The date on which the distillate fuel oil was received;
  - c. The volume of distillate fuel oil delivered in the shipment;
  - d. A statement that the distillate fuel oil was "low sulfur diesel" fuel. Low sulfur diesel fuel is defined as diesel fuel with a sulfur content equal to or less than 0.05% sulfur by weight.

In lieu of the fuel supplier certification stating a specific sulfur content of the shipment, the permittee may demonstrate compliance with the maximum sulfur content limit of the oil to be burned in the combustion turbines by obtaining a sample analysis of each shipment of distillate oil delivered to the station. Sampling frequency, for both sulfur and nitrogen content, shall be as specified in Section 60.334 of Subpart GG. The sampling method used shall be ASTM-4294-90 or an equivalent method approved in advance by the NRO Air Compliance Manager. (9 VAC 5-50-410 (Subpart GG), 9 VAC 5-80-490 F, and Condition 19 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 2. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon with the NRO Air Compliance Manager. These records shall include, but are not limited to:
  - a. The times of operation of each GE 7FA combustion turbine when firing with distillate fuel oil.
  - b. The times of operation of the duct burners for each GE 7FA combustion turbine.
  - c. Hourly throughput of distillate fuel oil and natural gas to each GE 7FA combustion turbine, for purposes of calculating hourly emissions for pollutants for which there is not a continuous emissions monitor.
  - d. Annual throughput of distillate fuel oil and natural gas to each GE 7FA combustion turbine, calculated monthly as the total for the most recent twelve complete calendar months.
  - e. Hourly throughput of natural gas to the duct burners for each GE 7FA combustion turbine, for purposes of calculating hourly emissions for pollutants for which there is not a continuous emissions monitor.
  - f. Annual throughput of natural gas to the duct burners for each GE 7FA combustion turbine, calculated monthly as the total for the most recent twelve complete calendar months.
  - g. All fuel supplier certifications.
  - h. All fuel sampling results and other records required by 40 CFR Part 60, Subparts Da, and GG, as they apply to the permitted emission units, unless explicitly waived by other conditions of this permit or by approval from the NRO Air Compliance Manager. The 40 CFR Part 60, Subpart GG requirement to monitor the nitrogen content of the fuel oil is waived by letter from Charles Forbes, DEQ, to M.G. Deacon, Dominion, dated October 27, 2003.
  - i. The hourly loads at which each GE 7FA combustion turbine has operated.
  - j. Monthly emissions calculations for PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, VOC, and formaldehyde from the GE 7FA combustion turbines stacks using calculation methods approved by the NRO Air Compliance Manager to

verify compliance with the lb/hr, ton/yr, and ppmvd (3-hr rolling average) emissions limitations in Condition II.P.6.

- k. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions.
- I. Results of the flue gas plume observations required each shift and the time and lighting conditions when the observations were conducted.
- m. Results of all stack tests, visible emission evaluations and CEMS performance evaluations.
- n. Maintenance records on the GE 7FA combustion turbine fuel use and water-tofuel ratio monitors.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-490 F and Condition 38 of 10/05/01 (amended 11/18/02, 12/8/04,

3. The permittee shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of these units, any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(9 VAC 5-80-490 F and 9 VAC 5-50-50 B)

7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## S. Testing

- The permitted facility (stacks from the combustion turbines, auxiliary boilers, and Units 3 and 4 boilers) shall be maintained so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods.
   (9 VAC 5-50-30 F, 9 VAC 5-80-490 E & F, and Condition 52 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 2. Beginning 12 to 24 months following the date of the last stack test of the initial compliance demonstration (following their construction), each of the Unit 6A and 6B combustion turbines shall be retested by the permittee at 21 to 27 month intervals for VOC and formaldehyde emissions; except that if the VOC emission rate is determined to be less than the formaldehyde "lbs/mmBtu" limit in this permit for the turbines, no formaldehyde test will be required during that year. If during three consecutive biennial tests, including the initial performance testing, neither turbine has tests results that show emissions at greater than 80 percent of the emission limits in Condition 21, the testing interval for each turbine may be expanded up to 63 months upon approval from the NRO Air Compliance Manager. On January 15, 2008, the NRO Air Compliance Manager approved a 63 month testing interval. If any subsequent test results in emissions of greater than 80 percent, testing at 21 to 27 month intervals shall resume. The tests for each turbine may be staggered within the schedule above, so that they are not necessarily conducted for both units in the

same calendar year. The tests are to be conducted using EPA Methods 25 or 25A for VOC and CARB Method 430 for formaldehyde, or equivalent methods approved by the NRO Air Compliance Manager for either pollutant. The tests need only be conducted at the maximum load in the normal operating range and the minimum load of the normal operating range, unless the minimum load is within ten percent of the maximum load, in which case testing is required at only the maximum load. The normal operating range shall be determined from records of actual operation. Upon request by the DEQ, the permittee shall conduct additional performance tests for the GE 7FA combustion turbines to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be agreed upon with the NRO Air Compliance Manager.

(9 VAC 5-50-30 G and Condition 49 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 25, 25a
NOx	EPA Method 7E, 20
SO2	EPA Method 20
CO	EPA Method 10
PM10	EPA Methods 201A and 202
Visible Emission	EPA Method 9

(9 VAC 5-80-490 E)

# T. Reporting

- 1. The permittee shall submit written reports to the NRO Air Compliance Manager of excess emissions from any process monitored by a continuous monitoring system (CMS) on a quarterly basis, postmarked no later than the 30<sup>th</sup> day following the end of each calendar quarter. These reports shall include, but are not limited to the following information:
  - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
  - Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the source; the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
  - c. The date and time identifying each period during which the continuous monitoring system was inoperative, except for the zero and span checks and the

nature of the system repairs or adjustments; and,

- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.
- e. Excess emissions (as defined below) shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOX concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NOX concentration" is the arithmetic average of the average NOX concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NOX concentrations immediately preceding that unit operating hour.

A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NOX concentration or diluent (or both).

Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).

f. The summary report and form shall meet the requirements of 40 CFR 60.7(d).

(9 VAC 5-50-50, 9 VAC 5-50-410 Subpart GG and Condition 43 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit))

Note: Additional reporting requirements for these units are included in the attached Section IX. (Title IV Permit Allowances and Requirements).

# **AUXILIARY BOILER (ID# ES-19)**

#### **U.** Limitations

- Nitrogen oxides (NO<sub>x</sub>) emissions from the auxiliary boiler shall be controlled by employing "low-NO<sub>x</sub>" burners.
   (9 VAC 5-50-260, 9 VAC 5-80-490 B & C and Condition 4 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- The approved fuel for the auxiliary boilers is natural gas with a maximum sulfur content of 0.3 grains per 100 dry standard cubic feet. A change in the fuel may require a permit to modify and operate.
   (9 VAC 5-80-490 B & C and Condition 17 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- The auxiliary boiler shall not consume more than 977 million cubic feet of natural gas per year. Compliance with this limit shall be determined monthly as the total for the most recent twelve complete calendar months.
   (9 VAC 5-80-490 B & C and Condition 12 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 4. Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below, except that the short term limits do not apply for periods of start up, shutdown, or malfunction:

Pollutant	Short-term Limit	Annual Limit
PM-10	0.7 lbs/hr <sup>†</sup>	3.7 tons/yr <sup>†</sup>
Sulfur Dioxide	0.1 lb/hr <sup>††</sup>	0.44 tons/yr <sup>††</sup>
Nitrogen Oxides (as NO <sub>2</sub> )	0.036 lbs/million Btu <sup>††</sup>	18 tons/yr <sup>††</sup>
Carbon Monoxide	14.9 lbs/hr <sup>†</sup>	74 tons/yr <sup>†</sup>
Volatile Organic Compounds	0.4 lbs/hr <sup>†††</sup>	2.0 tons/yr †††

All short-term emission limits represent averages for a three-hour sampling period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits.

<sup>&</sup>lt;sup>†</sup> (9 VAC 5-50-280)

<sup>&</sup>lt;sup>††</sup> (9 VAC 5-50-260)

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 36

††† (9 VAC 5-50-270)

(9 VAC 5-80-490 B & C and Condition 24 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 5. For the purpose of applying the conditions of this permit, the auxiliary boiler shall be considered to be in a period of start up or shutdown only when the rate of fuel input is in a period of identifiable and continuous fluctuation immediately following the start or immediately prior to the termination of a period of operation.
  (9 VAC 5-80-490 B & C and Condition 9 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 6. Visible emissions from the auxiliary boiler shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
  (9 VAC 5-50-80, 9 VAC 5-80-490 B & C, and Condition 30 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 7. Except where this permit is more restrictive than the applicable requirement, the auxiliary boiler shall be operated in compliance with the current requirements of 40 CFR 60, Subpart Dc. (9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 33 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE.

#### V. Monitoring

1. At least once during each work shift, the permittee shall have someone visually observe the stack of the auxiliary boiler for visible emissions when operating. If the observer sees an abnormally opaque flue gas plume, the permittee shall have a certified smoke reader conduct within 4 hours, or as soon thereafter as weather and lighting conditions permit, a 40 CFR Part 60, Method 9 visible emissions evaluation of the plume for a minimum of 12 minutes. An abnormally opaque flue gas plume is one that is obviously more opaque than the plume was at the time the plume was initially determined to be in compliance with the applicable visible emissions limit of the PSD/Non-attainment permit issued 10/05/01(amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11). When light or weather conditions do not allow for visible observations for an entire shift, a visible emissions observation need not be recorded for that shift, so long as this circumstance and the start and end time of the shift are noted in the log and the start and end time of the shift are also noted. In lieu of a once per shift observation for the stack, the permittee may install and operate a continuous opacity monitor that meets the design specifications of 40 CFR Part 60, Appendix B and is calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.13 and Appendix B or DEQ approved procedures that are equivalent to the requirements of 40 CFR 60.13 and Appendix B. If

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 37

continuous opacity monitor(s) are installed and operated, they shall be used only to indicate the need for a Method 9 visible emissions evaluation. (9 VAC 5-50-80, 9 VAC 5-50-280, and Condition 51 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## W. Recordkeeping

- The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon with the NRO Air Compliance Manager. These records shall include, but are not limited to:
  - a. Hourly throughput of natural gas to the auxiliary boiler, for purposes of calculating hourly emissions.
  - b. Annual throughput of natural gas to the auxiliary boiler, calculated monthly as the total for the most recent twelve complete calendar months.
  - c. All records required by 40 CFR Part 60, Subpart Dc, as they apply to the permitted emission unit, unless explicitly waived by other conditions of this permit or by approval from the NRO Air Compliance Manager.
  - d. Monthly emissions calculations for PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide and VOC from the auxiliary boiler, using calculation methods approved by the NRO Air Compliance Manager to verify compliance with the lb/hr and ton/yr emissions limitations in Conditions III.U.4.
  - e. Results of the flue gas plume observations required each shift and the time and lighting conditions when the observations were conducted.
  - f. Results of all stack tests and visible emission evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 F, 9 VAC 5-50-410 (Subpart Dc) and Condition 38 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

#### X. Testing

- The permitted facility (stacks from the combustion turbines, auxiliary boilers, and Units 3 and 4 boilers) shall be maintained so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods.
   VAC 5-50-30 F, 9 VAC 5-80-490 E & F, and Condition 52 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 2. Beginning no later than five years following the date of the last stack test of the initial compliance demonstration, the auxiliary boilers shall be retested by the permittee at

least once every five years for nitrogen oxides and carbon monoxide using U.S. EPA reference methods 7, 7A, or 7E, and 10, to determine compliance with the emission limits contained in Condition 24. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be agreed upon with the NRO Air Compliance Manager. The permittee shall submit a test protocol with two copies at least 30 days prior to testing for review by the NRO Air Compliance Manager. Two copies of the test results shall be submitted to the NRO Air Compliance Manager within 45 days after test completion and shall conform to the test report format enclosed with this permit. Fuel throughput-based emission factors that can be compared to hourly fuel throughput data for future emission limit compliance determinations shall be calculated from the test results for nitrogen oxides and carbon monoxide and included in the report. Upon request by DEQ, the permittee shall conduct additional performance tests for the auxiliary boilers to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be agreed upon with the NRO Air Compliance Manager. (9 VAC 5-50-490 E and Condition 50 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent methods approved by the NRO Air Compliance Manager in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
VOC	EPA Methods 25	
NOx	EPA Method 7, 7A, 7E	
SO2	EPA Method 6	
CO	EPA Method 10	
PM/PM10	EPA Methods 5, 17	
Visible Emission	EPA Method 9	

(9 VAC 5-80-490 E)

# Y. Reporting

No specific requirements.

# NATURAL GAS PIPELINE HEATERS (ID#'s ES-17 and 18)

#### Z. Limitations

- The approved fuel for the natural gas pipeline heaters is natural gas with a maximum sulfur content of 0.3 grains per 100 dry standard cubic feet. A change in the fuel may require a permit to modify and operate.
   (9 VAC 5-80-490 B & C and Condition 16 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 2. The 17.37 million Btu per hour natural gas pipeline heater shall not consume more than 150 million cubic feet of natural gas per year and the 11.85 million Btu per hour natural gas pipeline heater shall not consume more than 102 million cubic feet of natural gas per year. Compliance with these limits shall be determined monthly as the total for the most recent twelve complete calendar months.

  (9 VAC 5-80-490 B & C and Condition 13 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 3. Emissions from the operation of the 17.37 mmBtu/hr pipeline heater shall not exceed the limits specified below:

Pollutant	Short-term Limit	Annual Limit
Nitrogen Oxides (as NO₂)	1.4 lbs/hr	6.1 tons/yr
Carbon Monoxide	1.5 lbs/hr	6.3 tons/yr

All hourly emission limits represent averages for a three-hour sampling period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-50-260 and Condition 25 of the 10/05/01 (amended 11/18/02 and 12/8/04) PSD/Non-attainment Permit)

4. Emissions from the operation of the 11.85 mmBtu/hr pipeline heater shall not exceed the limits specified below:

Pollutant	Short-term Limit	Annual Limit
Nitrogen Oxides (as NO <sub>2</sub> )	1.0 lbs/hr	4.2 tons/yr
Carbon Monoxide	1.1 lbs/hr	4.7 tons/yr

All hourly emission limits represent averages for a three-hour sampling period.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-50-260 and Condition 26 of the 10/05/01 (amended 11/18/02 and 12/8/04) PSD/Non-attainment Permit)

- 5. For the purpose of applying the conditions of this permit, the pipeline heaters shall be considered to be in a period of start up or shutdown only when the rate of fuel input is in a period of identifiable and continuous fluctuation immediately following the start or immediately prior to the termination of a period of operation.
  (9 VAC 5-80-490 B & C and Condition 9 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- 6. Visible emissions from the pipeline heaters shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
  (9 VAC 5-50-80, 9 VAC 5-80-490 B & C, and Condition 30 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)
- Except where this permit is more restrictive than the applicable requirement, the natural gas pipeline heaters shall be operated in compliance with the current requirements of 40 CFR 60, Subpart Dc. (9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 34 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Note: Additional limitations that apply to all of the significant fuel burning equipment units are found at Section III. EE.

#### AA. Monitoring

1. At least once during each work shift, the permittee shall have someone visually observe the stacks of the pipeline heaters for visible emissions when operating. If the observer sees an abnormally opaque flue gas plume, the permittee shall have a certified smoke reader conduct within 4 hours, or as soon thereafter as weather and lighting conditions permit, a 40 CFR Part 60, Method 9 visible emissions evaluation of the plume for a minimum of 12 minutes. An abnormally opaque flue gas plume is one that is obviously more opaque than the plume was at the time the plume was initially determined to be in compliance with the applicable visible emissions limit of the PSD/Non-attainment permit issued 10/05/01(amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11). When light or weather conditions do not allow for visible observations for an entire shift, a visible emissions observation need not be recorded for that shift, so long as this circumstance and the start and end time of the

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 41

shift are noted in the log and the start and end time of the shift are noted in the log. In lieu of a once per shift observation for the stack, the permittee may install and operate a continuous opacity monitor that meets the design specifications of 40 CFR Part 60, Appendix B and is calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.13 and Appendix B or DEQ approved procedures that are equivalent to the requirements of 40 CFR 60.13 and Appendix B. If continuous opacity monitor(s) are installed and operated, they shall be used only to indicate the need for a Method 9 visible emissions evaluation.

(9 VAC 5-50-80, 9 VAC 5-50-280, and Condition 51 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## BB. Recordkeeping

- The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon with the NRO Air Compliance Manager. These records shall include, but are not limited to:
  - a. Annual throughput of natural gas to each natural gas pipeline heater, calculated monthly as the total for the most recent twelve complete calendar months.
  - b. Monthly emissions calculations for nitrogen oxides and carbon monoxide from the natural gas pipeline heaters using calculation methods approved by the NRO Air Compliance Manager to verify compliance with the lb/hr and ton/yr emissions limitations in Conditions III.Z.3 and Z.4.
  - c. All records required by 40 CFR Part 60, Subpart Dc, as they apply to the permitted emission unit, unless explicitly waived by other conditions of this permit or by approval from the NRO Air Compliance Manager.
  - d. Results of the flue gas plume observations required each shift and the time and lighting conditions when the observations were conducted.
  - e. Results of all stack tests and visible emission evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 F, 9 VAC 5-50-410 (Subpart Dc) and Condition 38 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

#### CC. Testing

 Test ports shall be provided when requested at the flues or stacks of the natural gas pipeline heaters in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).

(9 VAC 5-50-30 F, 9 VAC 5-80-490 E & F, and Condition 52 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent methods approved by the NRO Air Compliance Manager in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NOx	EPA Method 7
CO	EPA Method 10
Visible Emission	EPA Method 9

(9 VAC 5-80-490 E)

# DD. Reporting

No specific requirements.

# ALL SIGNIFICANT FUEL BURNING UNITS (COMBINATIONS OF ID#'s ES-3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, and 19)

#### **EE.** Limitations

- 1. Sulfur dioxide (SO<sub>2</sub>) emissions from the combination of Units 3, 4, 5, 6, 7, 8, 9, 10, and 11 (ID#'s ES-3, 4, 5, 6, 7, 8, 9, 10 & 11) shall not exceed 14,278 pounds per hour. Compliance with this limit shall be demonstrated by demonstrating compliance with Condition III.F.5 through means prescribed at Condition III.G.1. and by maintaining on site, available for inspection, a mathematics-based analysis showing that if all the units are operating at 145 percent of design capacity (the permittee may use a higher percent in the analysis) and Unit #5 is in compliance with Condition III.F.5, that the limit of this condition is not violated. (9 VAC 5-80-490 B & C and 5-40-930 A.2 and C)
- 2. Nitrogen oxides (NO<sub>x</sub>) emissions from the combination of Units 3, 4, 5, and 6A and 6B. (ID#'s ES-3, 4, 5, 13 & 14) shall not exceed 1,045 tons (measured as NO<sub>2</sub>) during each period of May 1 through September 30. If approved by the NRO Air Compliance Manager, the permittee may comply with this condition through obtaining credits for NO<sub>X</sub> emissions reductions occurring at other facilities within the Washington, DC ozone nonattainment area, so long as the reductions for which the credits have been obtained have not been used to satisfy other emissions reduction requirement(s). If the Regulations of the Commonwealth of Virginia State Air Pollution Control Board are amended pursuant to Section 10.1-1328 of the Code of Virginia, such that a more stringent limit is imposed, including a restriction on compliance by obtaining offsite reduction credits, the more stringent limit shall take precedence, as soon as the new regulatory limit becomes effective or earlier by written agreement from the permittee to DEQ. (Section 110 of the U.S. Clean Air Act; letter dated February 20, 2003, from John M. Daniel, Jr., of DEQ, to Pamela F. Faggert of Dominion; and, Section 10.1-1328 of the Code of Virginia)
- 3. Nitrogen oxides (NO<sub>X</sub>) emissions from the combination of Units 3, 4, 5, 6, 7, 8, 9, 10, 11, 6A and 6B (ID#'s ES-3, 4, 5, 6, 7, 8, 9, 10, 11, 13 & 14) and any other NO<sub>X</sub> emitting unit which provides energy utilized for electric power generation and which is located on the same property (including any constructed during the term of this permit) shall not exceed the following limit (measured as NO<sub>2</sub>) during each period of May 1 through September 30 (ozone season):
  - 0.15 pounds per million Btu's of heat (fuel) input, averaged over every period of 30 consecutive operating days which occurs wholly within the ozone season.

Compliance with this condition shall be demonstrated with the following equation:

 $\Sigma$ (Actual 30-day NO<sub>X</sub> Emissions)  $\div \Sigma$ <sub>i</sub> (Actual 30-day Heat input)

Dominion - Possum Point Power Station Permit Number: NRO70225

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 44

where:

 $\Sigma_i$  is the sum of all *i* units; *i* is each subject unit;

Actual 30-day NO<sub>X</sub> Emissions are the total NO<sub>X</sub> emissions (measured as if converted to NO<sub>2</sub>) in pounds during any 30 consecutive operating days;

Actual 30-day Heat Input is the total heat input in millions of Btu's for the same 30-day period as the emissions data.

An operating day is any calendar day that one or more emission units operate for one hour or more.

Each 30 consecutive days period need not include any day during which there was a forced outage of a unit that is essential to maintaining compliance with the 0.15 lbs. NO<sub>v</sub> per million Btu's cumulative average emission limit and for which total facility NO<sub>x</sub> emissions were no more than 27 tons. For this condition, "forced outage," means an unplanned removal of a unit from service, usually resulting from mechanical, electrical, hydraulic, environmental control systems trips, malfunctions. or operator-initiated trips in response to unit alarms. There shall not be more than 14 excluded days per rolling "30-day" compliance period. This means that an acceptable "30-day" compliance period can exceed 30 calendar days, but in no event, more than 44 calendar days. The 14 excluded days allowance notwithstanding, the permittee shall make a diligent effort to return the forced outage unit to service expeditiously and minimize the number of days excluded from the rolling 30-day period over which compliance with the pounds per million Btu limit is determined. The method of determining the data (NO<sub>x</sub> emissions and heat inputs) to insert into the equation above shall be in accordance with Title 40, Part 75, Appendix F, Section 8.1 of the Code of Federal Regulations (40 CFR Part 75 App.F. 8.1). except that the hourly rates determined by Section 8.1 shall be summed to give 30day totals. The collection of continuous emissions monitoring data from which the equation inputs are derived shall conform to 40 CFR Part 75. Compliance with the NO<sub>x</sub> monitoring requirements for the permittee's Phase-II Acid Rain (40 CFR Part 74) permit (copy attached to this permit) shall be considered compliance with the monitoring requirements of this permit. NO<sub>x</sub> emissions from the Units 6, 7, 8, 9, 10, and 11 turbines (not Units 6A & B) may alternatively be determined using a DEQapproved NO<sub>x</sub> emission factor for simple cycle combustion turbines multiplied by the actual heat input (derived from the fuel throughput multiplied by the heating value of the fuel). As an alternative to compliance with the preceding requirements of this Condition, the permittee may comply with 40 CFR Part 97 or a regulation of the Board approved by EPA as meeting the requirements of 40 CFR Part 96. This condition may be implemented for the units covered by either of the cited regulations once they become effective. The DEQ reserves the right to amend the 9/26/00 State Operating Permit (Ozone Attainment) from which this condition derives, as may be necessary should DEQ determine that use of this alternative compliance measure will prevent the attainment or maintenance of the air quality standards in the Washington, DC Ozone Nonattainment Area. If the 9/26/00 permit is amended during the term of this permit, any requirements of the amended permit that are more stringent than those of this condition shall take precedence over those of this

condition and shall be presumed to be part of this permit. Furthermore, any other  $NO_X$  emission limits in this permit are still enforceable, regardless of how compliance is achieved for this condition.

- (9 VAC 5-80-490 B & C and Conditions 3 and 8 of the 9/26/00 State Operating Permit (Ozone Attainment))
- 4. The permittee shall be responsible for ensuring that there is a permanent reduction in volatile organic compound (VOC) emissions at the Glen Burnie Division of Quebecor Printing Memphis, Inc., printing facility in Glen Burnie, Maryland of at least 114 tons per year from the annual average VOC emission rate of the years 1993 and 1994 (the last two typical years that the Glen Burnie facility has operated). (9 VAC 5-80-490 B and Condition 53 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## FF. Recordkeeping

- The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with Condition III.EE.1. of this permit. The content and format of such records shall be agreed upon with the NRO Air Compliance Manager. These records shall include, but are not limited to:
  - The highest SO2 emission rate recorded for any hour during each quarter by the CEMS for Unit 5 or calculated for Unit 5 by a method approved by the NRO Air Compliance Manager;
  - b. The mathematics-based analysis required in Condition III.EE.1.
  - c. Results of fuel sampling and/or fuel certifications for each shipment of fuel oil, including the sulfur and heat content, exhibited in a manner that readily shows upon inspection that the inputs assumed for the mathematics-based analysis required in Condition III.EE.1 are valid.
  - (9 VAC 5-40-50 and 9 VAC 5-80-490 F)
- The records kept by the permittee to comply with the Conditions of Sections EE., FF., and GG shall be available on site for inspection by the DEQ and shall be current for at least the most recent five years.
   (9 VAC 5-80-490 F and Condition 7 of the 9/26/00 State Operating Permit (Ozone Attainment))
- 3. The permittee shall maintain at the permitted facility a copy of the following document, and any supporting documentation. The document is the official document from the State of Maryland that was provided to the NRO Air Permit Manager indicating that the State of Maryland recognizes the reduction secured by the permittee to comply with Condition III.EE.4 as creditable and permanent. At a minimum the document shall state that the emission reduction has not been and will not be credited toward another reduction requirement and that the emissions cannot be resurrected from the same facility without the owner first obtaining a permit under

a federally-enforceable new source review program. The document must also provide evidence that the U.S. EPA accepts that the emission reductions are creditable for offset purposes.

(9 VAC 5-80-490 F and Conditions 54 and 55 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## GG. Reporting

- 1. A report presenting the results of the NO<sub>X</sub> monitoring for each ozone season in a manner that facilitates compliance assessment with Conditions III.EE.2 and 3 shall be submitted to the NRO Air Compliance Manager on or before November 15 of the same year. If not previously presented to DEQ, the next report shall include a copy of each ASTM, ASME or other methodology standard that is required to demonstrate compliance, but is not published in the Virginia or federal regulations. Any change in a standard should be presented in the first report following the change. Unless a paper copy is specifically requested by the DEQ, the permittee shall submit the report only on electronic media (e.g., CD-ROM or DVD) in a file format approved by the NRO Air Compliance Manager. The report must be accompanied by a signed document certification form. At a minimum, the report shall contain the following:
  - a. A statement at the beginning regarding whether the facility was in compliance with the NO<sub>x</sub> limits of Condition III.EE.2 and 3;
  - b. The total tons of NO<sub>X</sub> emitted from each of the Units 3, 4, 5, 6A and 6B and from all of them combined for each calendar month and the total ozone season (May 1 through September 30)
  - c. Which of the methods allowed by Condition III.EE.3 (average NO<sub>X</sub> emission rate or compliance with a cap under 40 CFR Part 97 or State Air Pollution Control Board regulations pursuant to 40 CFR Part 96) was used to establish compliance with Condition III.EE.3;
  - d. All 30-day rolling average NO<sub>X</sub> emission rates for the station, regardless of method of compliance with Condition III.EE.3;
  - e. The dates of any days for which data was not included in a 30-day rolling average due to a forced outage;
  - f. Who at DEQ was notified in the event of a forced outage for which days were not included in the average;
  - g. What action was taken to expeditiously return the forced outage unit(s) to service;
  - h. If emissions are not obtained by 40 CFR Part 75 continuous emissions monitoring for combustion turbine Units 6, 7, 8, 9, 10 and 11, the equation(s) used to calculate the emissions along with the emission factor, heating value of the fuel, fuel throughput, and how these variables were determined for each rolling 30-day average.

Dominion - Possum Point Power Station

Permit Number: NRO70225

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 47

Details of the format and process for submission of the report shall be as acceptable to the NRO Air Compliance Manager in conformance with DEQ policy at the time, which may include submission on electronic media.

(9 VAC 5-80-490 F, Condition 5 of the 9/26/00 State Operating Permit (Ozone Attainment). Note that no details of the monitoring, recordkeeping and reporting were ever proposed or prescribed as required by the 9/26/00 permit Condition 5 cited here, so details of the reporting are being prescribed in this Title V permit condition (as required by the 9/26/00 permit Condition 5) without citation to other document.

- 2. Within four business hours of the beginning of any period of forced outage during the months of May through September of a unit that is essential to maintaining compliance with the 0.15 lbs NO<sub>x</sub> per million Btu's cumulative average emission limit in Condition III.EE.3, the permittee shall notify the Northern Virginia Regional Office of the DEQ. In addition, the permittee shall provide to the NRO Air Compliance Manager a written statement within 14 days, which explains the nature of the forced outage, corrective action taken, and the number of calendar days which were, or are still likely to be, excluded from the rolling 30-day compliance demonstration averages. Compliance with this reporting requirement does not relieve the facility of its obligation to continue to comply with the 0.15 lbs NO<sub>x</sub> per million Btu's cumulative average emission limit and, if applicable, the 27 tons daily cap in Condition III.EE.3. (9 VAC 5-80-490 F, 9 VAC 5-20-180 and Condition 6 of the 9/26/00 State Operating Permit (Ozone Attainment))
- 3. If the DEQ determines, by any means, that the reductions required by Condition III.EE.4 are no longer valid for the purposes of this permit in accordance with 9 VAC 5-80-2120, the permittee shall demonstrate to the Regional Air Permit Manager that this situation has been corrected within sixty days of receiving notice from the Regional Air Compliance Manager of this determination. (9 VAC 5-80-490 G)

#### PERMANENTLY SHUTDOWN FUEL BURNING EQUIPMENT

#### HH. Limitations

Reactivation of the shut down Unit 1 or Unit 2 boiler would be subject to the provisions of 9 VAC 5 Chapters 50 and 80.
 (9 VAC 5-80-490 B & C and Condition 8 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

# BOILER MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)

#### II. Applicability

1. Emission Unit ID Nos. ES-17, ES-18, and ES-19 (natural gas pipeline heaters and auxiliary boiler) will be subject to 40 CFR Part 63, Subpart DDDDD (National

Dominion - Possum Point Power Station Permit Number: NRO70225

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 48

Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT)) when promulgated, unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the first substantive compliance date of the Boiler MACT. (9 VAC 5-80-110)

Permit Number: NRO70225

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 49

## **IV. Process Equipment Requirements**

## **ABOVE GROUND STORAGE TANK (ID# ES-26)**

#### A. Limitations

1. The 2 million gallon, above ground storage tank shall store only distillate fuel oil or other petroleum-based liquids that have a true vapor pressure equal to or lower than that of distillate fuel oil.

(9 VAC 5-80-490 B & C, Condition 20 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## B. Monitoring and Recordkeeping

 The permittee shall maintain records of the type of fuel and date for each time fuel is added to the 2 million gallon above ground storage tank. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-490 E and F)

# **COAL HANDLING AND STORAGE (ID# ES-12)**

#### C. Limitations

- 1. At the beginning of the term of this permit, there were no emission units permitted to be fueled with coal at the stationary source covered by this permit. Any construction, reconstruction, relocation, or modification of equipment that would use coal as a fuel is subject to the provisions of Chapters 50, 60 and 80 of the Commonwealth of Virginia State Air Polllution Control Board Regulations for the Control and Abatement of Air Pollution, except as specifically exempted by those chapters.
  - (9 VAC 5-80-490 A, 9 VAC 5-50-10, 9 VAC 5-60-300 and 9 VAC 5-80-1100, 1400, 1605, 2000)
- 2. Particulate emissions from the coal handling and storage operations shall be controlled by taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to the application of asphalt, oil, water, or suitable chemicals on stockpiles and maintaining a cover over the coal as it is being conveyed or transported, or treating it in an equally effective manner at all times when in motion. The coal-handling facilities shall be provided with adequate access for inspection.
  (9 VAC 5-80-490 C and 9 VAC 5-40-90)
- 3. Particulate emissions from the coal crusher (ES-12b) shall be controlled by two sheet metal enclosures (combined enclosure within an enclosure). The crusher/enclosure shall be provided with adequate access for inspection.

(9 VAC 5-80-490 C and Condition 3 of the 09/18/98 Permit to Modify & Operate)

- 4. The coal crusher shall process no more than 3,212,000 tons of coal per year, calculated monthly as the sum of each consecutive twelve months period. (9 VAC 5-80-490 B and Condition 4 of the 09/18/98 Permit to Modify & Operate)
- 5. Emissions from the operation of the coal crusher shall not exceed the limitations specified below:

Total Suspended Particulate (TSP) 0.33 lbs/hr and 0.96 tons per year

Compliance with Conditions IV. C. 4 and 6 shall be considered as compliance with these emission limits.

(9 VAC 5-80-490 C, 9 VAC 5-50-260 and Condition 5 of the 09/18/98 Permit to Modify & Operate)

- 6. Visible emissions from coal handling facilities shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. There is no exception to the 20% opacity limit for the coal crusher.
  - (9 VAC 5-80-490 B, 9 VAC 5-40-80, 9 VAC 5-50-410, Subpart Y, and Condition 6 of the 09/18/98 Permit to Modify & Operate)
- 7. The permittee shall operate the coal crusher and other coal handling equipment installed after October 24, 1974 in compliance with 40 CFR Part 60, Subpart Y, "Standards of Performance for Coal Preparation Plants."
  (9 VAC 5-80-490 B, 9 VAC 5-50-410, Subpart Y, and Condition 7 of the 09/18/98 Permit to Modify & Operate)

#### D. Monitoring

- 1. At least once per calendar month the permittee shall observe the car shaker (Unit ES-12a), the coal crusher (Unit ES-12b), and all transfer points associated with the coal conveying system (Unit ES-12C) for visible emissions. If visible emissions are observed, the permittee shall have someone who is certified in visible emissions evaluation determine by a 40 CFR Part 60 Method 9 visible emissions evaluation if the emissions are in compliance with condition C.6 above. Nothing in this condition shall be construed as precluding the permittee from taking corrective action at anytime, except during the visible emissions evaluation. If no operation of the coal-handling facilities for business purposes is necessary during a calendar month, the coal handling facilities need not be operated solely to make this compliance determination.
  - (9 VAC 5-80-490 E and 40 CFR 60.254 (b)(2))
- 2. The permittee shall observe the coal pile (Unit ES-12d) at least once while winds are gusting during daylight hours on any day characterized by high wind gusts without precipitation to determine if the dust control measures are effective. This would include, but not be limited to any day during which the National Weather Service reports wind gusts of 20 mph or greater at Reagan National Airport. If visible

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 51

emissions are observed, the permittee shall correct the conditions causing the visible emissions as expeditiously as practical. The permittee shall record all instances of visible emissions and the corrective action taken (if any) in a log. The log shall be kept on site and available for inspection by DEQ for the most recent five years. If no coal pile is maintained on site the log shall be updated to state that no coal pile was present at the station.

(9 VAC 5-80-490 E)

## E. Recordkeeping

- The permittee shall maintain on site records of the inspections and visible emissions evaluations of the coal handling and storage facilities required in Conditions IV.D.1 and 2. above. The content and format of such records shall be arranged with the NRO air compliance manager. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-490 F)
- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with Conditions IV.C. 4 and 5 above. The content and format of such records shall be arranged with the NRO air compliance manager. These records shall include, but are not limited to the yearly throughput of coal to the crusher, calculated monthly as the sum of each consecutive 12 month period. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
  (9 VAC 5-80-490 E and Condition 8 of the 09/18/98 Permit to Modify & Operate)

## F. Reporting

1. The permittee shall submit concurrently with, or as part of the quarterly excess emissions report required in Section III, a report stating when inspections and visible emissions evaluations of the coal handling and storage facilities required in Conditions D.1 and 2 above were conducted. The reports shall include statements describing the coal storage dust control measures and whether the measures were found to be effective and if and when any violations of the opacity limit on the coal handling facilities were observed. If coal storage dust control measures were determined to be ineffective or opacity limits on coal handling facilities were violated, the quarterly report shall state what corrective actions were taken.
(9 VAC 5-80-490 F)

# V. Facility Wide Conditions

#### A. Limitations

1. Fugitive emission controls shall include the following, or equivalent, as a minimum:

Volatile organic compounds shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

(9 VAC 5-50-270 and Condition 6 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

# **B. Exceptions**

1. The following applies only to emission units covered by the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit. Except as explicitly granted in this permit, exceptions to the requirements by reference and to other applicable permits, on the basis that the requirements of this permit are more restrictive or that explicitly proposed alternative measures are equivalent in function, are only valid if approved by the NRO Air Compliance Manager and, for requirements of 40 CFR Part 60, by written authorization from the U.S. EPA Region-III office.

(Condition 37 of the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

- 2. Exempted from the requirements of 9 VAC 5 Chapter 40, Article 4 for both volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are the following:
  - a. Process operations with a process weight rate capacity less than 100 pounds per hour;
  - b. Any combustion unit using solid fuel with a maximum heat input of less than 350,000 Btu per hour;
  - c. Any combustion unit using liquid fuel with a maximum heat input of less than 1,000,000 Btu per hour;
  - d. Any combustion unit using gaseous fuel with a maximum heat input of less than 10,000,000 Btu per hour.

(9 VAC 5-40-240 and Condition 11 of 7/21/00 State Operating Permit (NO<sub>x</sub> RACT))

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 53

## C. Recordkeeping

 The permittee shall maintain sufficient documentation to support any permittee claims that units on site are exempt from Reasonably Available Control Technology requirements, especially, but not limited to, claims of exemption for Units 6, 7, 8, 9, 10, and 11 (ID#'s 6, 7, 8, 9, 10, and 11) as presented in Section VII of this permit. (9 VAC 5-80-490 E and Condition 14 of 7/21/00 State Operating Permit (NO<sub>X</sub> RACT))

## D. Relationship of Consent Decree

1. The Consent Decree entered by the United States District Court for the Eastern District of Virginia, Civil Action Nos. 03-CV-517-A and 03-CV-603-A, on October 10, 2003 between Virginia Electric and Power Company and the United States of America, et al. (the "Consent Decree"), as such Consent Decree might be amended or modified from time to time in accordance with its terms, is incorporated in its entirety into this permit by reference and is attached as Appendix C to this permit. The permittee's obligations under this permit shall be to comply with the terms and conditions of the Consent Decree that relate to the operation and permitting of Possum Point Power Station exclusively, and such compliance shall be determined exclusively by reference to the terms and conditions of the Decree. Whenever any conflict or ambiguity arises between the Consent Decree and this permit, the terms and conditions of the Consent Decree control. Where related provisions between the two documents are not in conflict, but one is more stringent than the other, the more stringent provision shall prevail. Compliance with the monitoring, recordkeepoing, reporting, testing and compliance certification requirements in the Consent Decree that relate to the operation of Possum Point Power Station shall be deemed to satisfy the monitoring, recordkeeping, reporting, testing, and compliance certification requirements of this permit arising out of the terms and conditions of the Consent Decree. The provisions of Paragraph 136 of the Consent Decree, but not those provisions exclusively, shall be complied with whenever relevant to DEQ air emissions permitting actions pertaining to the Possum Point Power Station.

# VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emis- sion Unit No.	Emission Unit Description	Citation (see footnotes)	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-1	Coal Railcar Thaw Shed Burners	Size/capacity <sup>†††</sup>	CO, NO <sub>X</sub> , PM <sub>10</sub> , SO <sub>2</sub>	Total 8.8 million Btu/hr
IS-2	*	NA	NA	NA
IS-3A	Combustion Turbine No.3 Blackstart Diesel Generator	Size/capacity <sup>†††</sup>	CO, NO <sub>X</sub> , PM <sub>10</sub> , SO <sub>2</sub>	300 hp
IS-3B	Combustion Turbine No.4 Blackstart Diesel Generator	Size/capacity <sup>†††</sup>	CO, NO <sub>X</sub> , PM <sub>10</sub> , SO <sub>2</sub>	300 hp
IS-4	Lube Oil Systems/Waste OilSystems/Hydraulic Oil Systems	Emission Level <sup>††</sup>	VOC	NA
IS-8	Gasoline Tank	Emission Level <sup>††</sup>	VOC	3,000 gallons
IS-9	Kerosene Tank	Emission Level <sup>††</sup>	voc	2,000 gallons
IS-10	Combustion Turbine No.3 & No. 4 Blackstart Diesel Generator Fuel Tank	Size/capacity <sup>†††</sup>	VOC	110 gallons
IS-11	Anitfreeze Usage on Coal Conveyors	Emission Level <sup>††</sup>	voc	NA
IS-12	Oily Waste Pond	Emission Level <sup>††</sup>	voc	450,000 gallons
IS-13	Flyash Handling System	Emission Level <sup>††</sup>	PM <sub>10</sub>	NA
IS-14	Ash Storage Ponds	Emission Level <sup>††</sup>	PM <sub>10</sub>	NA
IS-15	Fuel Additive System	Emission Level <sup>††</sup>	VOC	NA
IS-16	No.2 Fuel Oil Truck Unloading/Loading Station	Emission Level <sup>††</sup>	voc	NA
IS-21	Cooling Tower	Emission Level <sup>††</sup>	PM <sub>10</sub>	178,000 gallons/min

<sup>&</sup>lt;sup>†</sup> 9 VAC 5-80-720 A.

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, monitoring, recordkeeping and reporting shall not be required for these emission units in accordance with 9 VAC 5-80-490 C, E, and F.

<sup>&</sup>lt;sup>††</sup> 9 VAC 5-80-720 B.

<sup>†††9</sup> VAC 5-80-720 C.

<sup>\*</sup> Propane tank listed in the application under this emission unit number has been removed from the site.

# VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-310 B	Demonstration of NO <sub>x</sub> RACT	The Unit 6, 7, 8, 9, 10 & 11 combustion turbines (ID#'s ES 6 through 11) are exempted by 9 VAC 5-40-311-3a from demonstrating NO <sub>X</sub> RACT, because the annual capacity factors are less than 5%. RACT means Reasonably Available Control Technology as defined at 9 VAC 5-40-250 C. This exemption also applies to other types of emission units listed under 9 VAC 5-40-311C.3 and is also stated in Condition 12 of the 7/21/00 State Operating Permit (NO <sub>X</sub> RACT). If the capacity factor of any of the exempted units exceeds 5% during any calendar year, the exemption ceases for the unit three months after that calendar year.
40 CFR 68	Chemical Accident Prevention Provisions	This does not apply to the ammonia tanks for the SCR control on Units 6A & B, because the ammonia is in aqueous solution at a concentration of less than 20%, which is specifically exempted by 40 CFR Part 68 §130 (b)
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	Although the 2 million gallon distillate fuel oil storage tank, emission unit ID# ES-26 was originally affected by this Subpart when it was permitted under the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit), the rule has been revised to exempt all tanks containing liquids of vapor pressure less than 3.5 kPa, which this tank does. The other large storage tanks (ID#'s 27, 28, and 29) are exempt from Subparts Ka and Kb, because the tanks were constructed prior to May 18, 1978.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-500)

#### VIII. General Conditions

## A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-490 N)

# **B. Permit Expiration**

- 1. This permit has a fixed term of four years. The expiration date shall be the date four years from the effective date of the permit. This four year term is valid for the initial issuance only, and is shorter than the standard five-year term in order to have the expiration of this permit and the end of the currently-applicable Title IV Acid Rain Program requirements schedule coincide. Terms for this permit following future renewals are expected to be five years. Unless the owner submits a timely and complete renewal application to DEQ consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.
- 2. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 3. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.
- 4. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.
- 5. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 6. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

## C. Recordkeeping and Reporting

- All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.
     (9 VAC 5-80-490 F)
- Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-490 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year, except that the report required at Condition III.GG.1 shall be submitted no later than November 15 of each calendar year. These reports must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30, inclusive, and July 1 to December 31, inclusive, except that the time period to be addressed in the report required at Condition III.GG.1 is May 1 to September 30, inclusive.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - Exceedance of emissions limitations or operational restrictions,
    - Excursions from control device operating parameter requirements, as
      documented by continuous emission monitoring, periodic monitoring, or
      compliance assurance monitoring which indicates an exceedance of
      emission limitations or operational restrictions; or,

- Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the
  permittee shall include a statement in the report that "no deviations from
  permit requirements occurred during this semi-annual reporting period."
   (9 VAC 5-80-490 F)

# D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than <u>March 1</u> each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to  $\ni$  114(a)(3) and  $\ni$  504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with VAC 5-80-430 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
- 3. The identification of each term or condition of the permit that is the basis of the certification.
- Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
- 5. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 6. The status of compliance with the terms and conditions of this permit for the certification period.
- Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U.S. Environmental Protection Agency, Region III 1650 Arch Street

Philadelphia, PA 19103-2029. (9 VAC 5-80-490 K.5)

## E. Permit Deviation Reporting

The permittee shall notify the Director, Northern Virginia Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VIII.C.3. of this permit.

(9 VAC 5-80-490 F.2)

# F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after discovery, notify the Director, Northern Virginia Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Northern Virginia Region. (9 VAC 5-20-180 C)

- 1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
- The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are listed below:

- a. Unit #3 (ID# ES-3)
- b. Unit #4 (ID# ES-4)
- c. Unit #5 (ID# ES-5)
- d. Unit #6A (ID# ES-13)
- e. Unit #6B (ID# ES-14)
- 3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.
- All emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C must make written reports within 14 days of the malfunction occurrence. (9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

#### G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-490 G.1)

#### H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit

termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (9 VAC 5-80-490 G.2)

## I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9 VAC 5-80-490 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-490 G and L, 9 VAC 5-80-550 and 9 VAC 5-80-660)

# K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-490 G.5)

# L. Duty to Submit Information

- 1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
  (9 VAC 5-80-490 G.6)
- Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.9.
   (9 VAC 5-80-490 K.1)

#### M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 62

Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-490 H)

# N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion. (9 VAC 5-40-20 E, 9 VAC 5-50-90, and 9 VAC 5-50-50)

#### O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E, and 9 VAC 5-50-20 E)

## P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3. (9 VAC 5-80-490 J)

## Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

# R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

 The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D. (9 VAC 5-80-490 L)

# S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-510 G)

#### T. Transfer of Permits

- No person shall transfer a permit from one location to another or from one piece of equipment to another. (9 VAC 5-80-520)
- In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560. (9 VAC 5-80-520)
- In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560. (9 VAC 5-80-520)

#### U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 65

- c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
- The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement. (9 VAC 5-80-650)

#### V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

#### W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submits such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-430 E)

## X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A - F)

## Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-490 A)

#### Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

#### AA. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-490 I)

## **BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-490 except subsection N shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700. (9 VAC 5-80-490 I)

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 67

## **CC. Temporary Suspension of Enforcement**

Per VA Air Pollution Control Law, Title 10.1, Chapter 13 Section 1307.3(5), the permittee may request the Executive Director or his duly authorized representative to temporarily suspend the enforcement of any regulation or permit requirement applicable to any part of an electrical generation and transmission system, when a public electric utility providing power within the Commonwealth so requests and has suffered a force majeure event as defined in subdivision 7 of section 59.1-21-18:2, (i.e., *force majeure* means an act of God or any other cause not reasonably within the control of the supplier.) (VA Air Pollution Control Law, Title 10.1, Chapter 13 Section 1307.3(5))

# **DD. Carry Over of Fifth-Year Requirements**

Any requirements of this permit that would be applicable only in the fifth year of the permit term, which has been shortened to four years, shall be carried over to the first year of the next term of this permit as if it were a fifth year of this permit term unless specifically stated in the permit at renewal to be no longer applicable.

# IX. Title IV Permit Allowances and Requirements

#### A. Statutory and Regulatory Authorities

In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).

(9 VAC 5-80-490 B.2)

# B. SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for affected units (9 VAC 5-80-490 A.4)

		2008	2009	2010	2011	2012
Unit 3	SO <sub>2</sub> allowances, under Table 2, 40 CFR Part 73. (tons)	2646 tons per year	2646 tons per year	2253 tons per year	2253 tons per year	2253 tons per year
	NO <sub>x</sub> limit	Department averaging placalendar year not exceed the emission limits shall not have Under the placemission rate the Btu-weig units had the under the ap 76.6, or 76.7 emission limit representative sentence (as year under the compliance of annual emission limit of annual emission limit representative sentence (as year under the compliance of annual emission limit of annual emission limits and limits of annual emission limits of annu	of Environment an for unit 3, ear 2012. Unde the annual average itation (ACEL) we an annual hear, the actual er for the units the annual average for the units the demonstrate set forth in 40 are plan, then the or that year wistion limitation are the described all other application of the described all other applications.	the Commonvatal Quality app ffective for calcar the plan, this rage alternative of 0.30 lb./mm eat input less the bin the plan shader age NO <sub>x</sub> emed, during the ions limitations or early elections and the requirement of the plan shall be the total annual head annual head of NO <sub>x</sub> compliant able requirement of the plan shall shal	proves a NO <sub>x</sub> elendar year 200 unit's NO <sub>x</sub> employed a contemporar Btu. In additionan 490,000 manual average II be less than dission rate for same period of units, the application of the distribution of the deemed to be deeme	emission 08 through issions shall neous on, this unit nmBtu. e NO <sub>x</sub> or equal to the same if time, R §§76.5, plicable ated e prior met for a e in aneous nit shall R Part 76

Note: See Subsection C.2.a.

		2008	2009	2010	2011	2012
Unit 4	SO <sub>2</sub> allowances, under Table 2, 40 CFR Part 73. (tons)	6723 tons per year	6723 tons per year	6736 tons per year	6736 tons per year	6736 tons per year
	NO <sub>x</sub> limit	Department averaging place calendar year not exceed the emission liming shall not have under the Btu-weig units had the under the ap 76.6, or 76.7 emission liming representative sentence (as year under the compliance of annual emission liming the including the	of Environmer an for unit 4, en for unit 4, en for unit 4, en for 2012. Under the annual and the an annual had an, the actual en for the units had annual and the demonstrated annual by been operated by been operated annual and the demonstrated as set forth in 40 and the demonstrated and the described all other application and the described all other application to reapplication to the described all other application to reapplication to the described all other application to the described all other applications.	the Commony tal Quality approfective for call replan, this rage alternative of 0.30 lb./mmetal input less to Btu-weighted a in the plan shaderage NO <sub>x</sub> emed, during the sions limitations or early electione under §76.7 es that the requirement of NO <sub>x</sub> compliant and annual head of NO <sub>x</sub> compliant able requiremently for a NO <sub>x</sub> coess emissions.	proves a NO <sub>x</sub> endar year 200 unit's NO <sub>x</sub> eme e contemporar Btu. In additional average and the less than 1926,000 manual average and the designation of the designation of the deemed to be the less of 40 CFF and the limit. The plan, this upents of 40 CFF and the demonstration of the deemed to be the limit. The plan, this upents of 40 CFF and the limit and the limi	mission 08 through issions shall neous on, this unit nmBtu. e NO <sub>x</sub> or equal to the same of time, R §§76.5, plicable ated e prior met for a e in aneous nit shall R Part 76

Note: See Subsection C.2.a.

Unit 5	SO <sub>2</sub> allowances, under Table 2, 40 CFR Part 73. (tons)	4335 tons per year	4335 tons per year	4343 tons per year	4343 tons per year	4343 tons per year
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Note: See Subsection C.2.a.

January 20, 2009 (modified February 10, 2010 and May 25, 2011)

Page 70

Unit 6A	SO <sub>2</sub> allowances, under Table 2, 40 CFR Part 73. (tons)	None	None	None	None	None
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Note: See subsection C.2.b.

Unit 6B	SO <sub>2</sub> allowances, under Table 2, 40 CFR Part 73. (tons)	None	None	None	None	None
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Note: See subsection C.2.b.

# C. Additional Requirements, Notes, Comments, and Justifications.

# 1. Additional Requirements:

Virginia Electric and Power Company shall submit a complete permit application that includes all of the information required under 40 CFR  $\S72.21$  and 72.31 and includes a complete  $NO_x$  compliance plan in accordance with 40 CFR  $\S76.9(c)$  at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used. (9 VAC 5-80-430 C.5)

#### 2. Notes:

- a. SO<sub>2</sub> allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of this unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of this unit remain obligated to hold sufficient allowances to account for SO<sub>2</sub> emissions from this unit in accordance with 40 CFR 72.9(c)(1).
  (9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)
- b. Units 6A and 6B and the six simple-cycle combustion turbines constructed prior to 1990 (Units 6, 7, 8, 9, 10 and 11) at the Possum Point Power Station are not eligible for SO<sub>2</sub> allowance allocation by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program, so none were assigned in 40 CFR Part 73, Table 2.

(9 VAC 5-80-420 C.6)

#### 3. Comments:

- a. Although units 6A and 6B and the six simple-cycle combustion turbines constructed prior to 1990 (Units 6, 7, 8, 9, 10 and 11) were not assigned SO<sub>2</sub> allowances under the Acid Rain Program they are subject to other (non-Acid Rain Program) sulfur dioxide limitations found in Section III of this permit
- b. Units 1 and 2, which were listed in previous Acid Rain permits for the Possum Point Power Station, were permanently shut down in 2002, and therefore are not listed in this permit.

#### 4. Justifications:

- Units 5 and 6A and 6B are gas-fired or oil-fired units and are not subject to NO<sub>x</sub> limitations under 40 CFR Part 76.
   (9 VAC 5-80-420 D)
- b. Heat recovered from Units 6A and 6B powers a heat recovery steam generator.
   The heat recovery steam generator is not equipped with any fuel firing capabilities, and is therefore not subject to acid rain requirements under 40 CFR Parts 72 through 76.
   (9 VAC 5-80-420 D)

# X. NO<sub>x</sub> Budget Trading Program Requirements

# A. NO<sub>x</sub> Budget Permit General Conditions

- 1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO<sub>x</sub> Budget Unit and falls subject to the NO<sub>x</sub> Budget emission limitations under 9 VAC 5-140-40 or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A, each NO<sub>x</sub> Budget source is required to have a federally enforceable permit. This section of the document represents the NO<sub>x</sub> Budget permit. (9 VAC 5-140-40 or 9 VAC 5-140-800)
- 2. The  $NO_x$  Budget permit will be administrated by the VADEQ under the authority of 9 VAC 5-80-360 et seq., and 9 VAC 5-140-10 et seq. (9 VAC 5-140-200 A)
- 3. The following air emission units have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NO<sub>x</sub> Budget Trading program as "opt-in" air emission sources.
  (9 VAC 5-140-40 A)

	Table X − 1 Facility NO <sub>x</sub> Budget Units							
Facility Unit ID	Unit NATS Code	Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)					
3	003804000003	Unit 3 Combustion Engineering Boiler	1,150	110				
4	003804000004	Unit 4 Combustion Engineering Boiler	2,350	230				
5	003804000005	Unit 5 Combustion Engineering Boiler	8,500	855				
6A	00380400006A	Unit 6A Combined Cycle Combustion Turbine	2,080 (gas) 1,937 (oil)	340				
6B	00380400006B	Unit 6B Combined Cycle Combustion Turnine	2,080 (gas) 1,937 (oil)	340				

Note: The Maximum Rated Capacity and Maximum Generation Capacity are not by themselves applicable requirements, but may be used to determine applicability of a requirement and may be used in the calculations for applicable requirements.

4. The following equipment has met the requirements for Retirement Exemption from NO<sub>x</sub> Budget Trading program (9 VAC 5-140-50). This equipment will not emit any nitrogen oxides without prior notification to the permitting agency and modification to the operating permit.

(9 VAC 5-140-50 C.1 and C.2, and 9 VAC 5-140-50 C.6.a and 6.b)

Table X – 2 NO <sub>x</sub> Budget Retirement Exemption Units						
Facility Unit ID EIA Code Unit Name and description						
1	003804000001	Unit 1 Combustion Engineering Boiler				
2 003804000002 Unit 2 Combustion Engineering Boiler						

(9 VAC 5-140-240.1)

5. This NOx Budget permit is effective May 31, 2004.

# **B. Standard Requirements**

- 1. Continuous Monitoring requirements.
  - a. The owners and operators and, to the extent applicable, the  $NO_X$  authorized account representative of each  $NO_X$  Budget source and each  $NO_X$  Budget Unit at the source shall comply with the monitoring requirements of 9 VAC 5-140-700 et seq.
  - b. The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (subparts H of 40 CFR 75 and 40 CFR 97) shall be used to determine compliance by the unit with the NO<sub>x</sub> Budget emissions limitation under Conditions X.B.2.a. through X.B.2.h. The following approved methods or other methods approved by the Northern Virginia Regional Air Compliance Manager which conform to 40 CFR Part 75 will be used to calculate NOx Control Period and Annual emission rates:

Table X - 3
NOx Mass Emission Rate Monitoring

r							
UNIT AND TYPE	ITEM MONITORED	MONITORING METHODS (40 CFR 75)					
UNITS 3 AND 4 GAS FIRED	NOx Concentration (ppm) NOx rate (lb/mmBtu) DILUENT GAS (02 OR C02) HEAT rate (mmBtu/hr)	CEMS CEMS DILUENT GAS MONITOR Appendix D					
UNIT 5 OIL FIRED	NOx Concentration (ppm) NOx rate (lb/mmBtu) STACK FLOW DILUENT GAS (02 OR C02) HEAT rate (mmBtu/hr)	CEMS CEMS STACK FLOW MONITOR DILUENT GAS MONITOR STACK FLOW MONITOR					

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 74

UNITS 6A AND 6B GAS AND OIL FIRED	,	CEMS CEMS DILUENT GAS MONITOR
	HEAT rate (mmBtu/hr)	Appendix D

(9 VAC 5-140-60 B.1 and 9 VAC 5-140-60 B.2)

#### 2. Nitrogen oxides requirements.

- a. The owners and operators of each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget Unit at the source shall hold NO<sub>x</sub> allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO<sub>x</sub> allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO<sub>x</sub> emissions for the control period from the unit, as determined in accordance with Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO<sub>x</sub> Budget Trading Program, or a change in regulatory status, of a NO<sub>x</sub> Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870. (9 VAC 5-140-60 C.1)
- Each ton of nitrogen oxides emitted in excess of the NO<sub>x</sub> Budget emissions limitation shall constitute a separate violation of the Clean Air Act, and applicable Virginia Air Pollution Control law.
   (9 VAC 5-140-60 C.2)
- c. A  $NO_x$  Budget Unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004 (or the date on which the unit commences operation if the date falls within the Control Period). (9 VAC 5-140-60 C.3)
- d.  $NO_x$  allowances shall be held in, deducted from, or transferred among  $NO_x$  Allowance Tracking System accounts in accordance with 9 VAC 5-140-400 et seq., 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., and 9 VAC 5-140-800 et seq. (9 VAC 5-140-60 C.4)
- e. A  $NO_X$  allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the  $NO_X$  allowance was allocated. (9 VAC 5-140-60 C.5)
- f. A NO<sub>x</sub> allowance allocated by the permitting authority or the administrator under the NO<sub>x</sub> Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO<sub>x</sub> Budget Trading Program. No provision of the NO<sub>x</sub> Budget Trading Program, the NO<sub>x</sub> Budget permit application, the NO<sub>x</sub> Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization. (9 VAC 5-140-60 C.6)
- g. A  $NO_x$  allowance allocated by the permitting authority or the administrator under the  $NO_x$  Budget Trading Program does not constitute a property right. (9 VAC 5-140-60 C.7)

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 76

- h. Upon recordation by the administrator under 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., or 9 VAC 5-140-800 et seq., every allocation, transfer, or deduction of a NO<sub>X</sub> allowance to or from a NO<sub>X</sub> Budget Unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO<sub>X</sub> Budget permit of the NO<sub>X</sub> Budget Unit by operation of law without any further review. (9 VAC 5-140-60 C.8)
- 3. Excess emissions requirements.
  - a. The owners and operators of a NO<sub>x</sub> Budget Unit that has excess emissions in any control period shall:
    - i. Surrender the NOX allowances required for deduction under 9 VAC 5-140-540
       D 1; and
    - ii. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

(9 VAC 5-140-60 D)

# C. Recordkeeping and Reporting Requirements.

The following requirements concerning recordkeeping and reporting shall apply:

- Unless otherwise provided, the owners and operators of the NO<sub>X</sub> Budget source and each NO<sub>X</sub> Budget Unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator. (9 VAC 5-140-60 E.1)
  - a. The account certificate of representation for the  $NO_X$  authorized account representative for the source and each  $NO_X$  Budget Unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the  $NO_X$  authorized account representative.(9 VAC 5-140-60 E.1)
  - b. All emissions monitoring information, in accordance with 9 VAC 5-140-700 et seq. of this part; provided that to the extent that 9 VAC 5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply.(9 VAC 5-140-60 E.1)

- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the  $NO_X$  Budget Trading Program. (9 VAC 5-140-60 E.1)
- d. Copies of all documents used to complete a NO<sub>x</sub> Budget permit application and any other submission under the NO<sub>x</sub> Budget Trading Program or to demonstrate compliance with the requirements of the NO<sub>x</sub> Budget Trading Program.(9 VAC 5-140-60 E.1)
- 2. The  $NO_X$  authorized account representative of a  $NO_X$  Budget source and each  $NO_X$  Budget Unit at the source shall submit the reports and compliance certifications required under the  $NO_X$  Budget Trading Program, including those under 9 VAC 5-140-300 et seq., 9 VAC 5-140-700 et seq., or 9 VAC 5-140-800 et seq. (9 VAC 5-140-60 E.2)

## D. Emission Testing

- The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.
   (9 VAC 5-40-30 or 9 VAC 5-50-30 and 9 VAC 5-140-710)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent methods approved by the DEQ NRO Air Compliance Manager in accordance with procedures approved by the DEQ as follows:

Table X – 4
Test Methods

Pollutant or Stack Parameter	CEM Certification Test Method 40 CFR 60					
NO <sub>x</sub> Concentration	EPA Method 7E					
Opacity	EPA Method 9					
Moisture	EPA Method 4					
Stack Gas Velocity/Flow	EPA Method 2, 2G, 2H, or 2F					
Diluent gas	EPA Method 3A					

(9 VAC 5-140-700 to 710)

#### E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NOx Budget Trading Program, a  $NO_x$  Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law. (9 VAC 5-140-60 F.1)

- Any person who knowingly makes a false material statement in any record, submission, or report under the NO<sub>x</sub> Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law. (9 VAC 5-140-60 F.2)
- 3. No permit revision shall excuse any violation of the requirements of the NO<sub>x</sub> Budget Trading Program that occurs prior to the date that the revision takes effect. (9 VAC 5-140-60 F.3)
- Each NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget Unit shall meet the requirements of the NO<sub>x</sub> Budget Trading Program. (9 VAC 5-140-60 F.4)
- 5. Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget source or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source shall also apply to the owners and operators of such source and of the NO<sub>x</sub> Budget Unit s at the source.

  (9 VAC 5-140-60 F.5)
- 6. Any provision of the NO<sub>x</sub> Budget Trading Program that applies to a NO<sub>x</sub> Budget Unit or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget Unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO<sub>x</sub> authorized account representative of one NO<sub>x</sub> Budget Unit shall not be liable for any violation by any other NO<sub>x</sub> Budget Unit of which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative. (9 VAC 5-140-60 F.6)

#### F. Effect on Other Authorities.

 No provision of the NO<sub>x</sub> Budget Trading Program, a NO<sub>x</sub> Budget permit application, a NO<sub>x</sub> Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source or NO<sub>x</sub> Budget Unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act. (9 VAC 5-140-60 G)

# XI. Clean Air Interstate Rule (CAIR)

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR application attached to this permit as Appendix D. (9 VAC 5-80-490, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

## XII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-690 concerning review of proposed permits by EPA and draft permits by affected states

(9 VAC 5-80-490 N and 9 VAC 5-80-700)

#### A. Limitations

1. Emissions from the operation of each GE 7FA combustion turbine and its associated duct burners (DB's) shall not exceed the limits specified below:

Acrolein 6.4 x 10-6 lbs/MMBtu

Cadmium 4.8 x 10-6 lbs/MMBtu

Chromium 1.1 x 10-5 lbs/MMBtu

Manganese 7.9 x 10-4 lbs/MMBtu

All emission limits represent averages for a three-hour sampling period. (Condition 67 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## **B.** Compliance

1. The emissions from the operation of each GE 7FA combustion turbine may be presumed to be in compliance with the limits of Condition 67, so long as the units are in compliance with the PM-10 limits and the fuel type requirement of Conditions 21 and 14, respectively, of the federally enforceable section of this permit. If the units are found not to be in compliance with those requirements or there is other probable cause to suspect noncompliance with the limits of Condition 67, DEQ may request that stack emissions tests be conducted to determine compliance with the limits of Condition 67. The methods for testing to meet this condition are to be agreed to by the NRO Air Compliance Manager.

(Condition 68 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

## C. Reporting

1. The format for reporting the results of testing, if and when required to determine the emission rate of toxic pollutants in Condition 67, shall be arranged with the NRO Air Compliance Manager.

(Condition 69 of 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08 and 5/20/11) PSD/Non-attainment Permit)

Dominion - Possum Point Power Station Permit Number: NRO70225 January 20, 2009 (modified February 10, 2010 and May 25, 2011) Page 80

### D. General

- Except for accidental or infrequent odor, if the facility emits odor the provisions of 9 VAC Chapter 40, Part II, Article 2, Emission Standards for Odor (Rule 4-2) apply. (9 VAC 5-40-130)
- Except as provided in 9 VAC 5-60-200 C,D, and E, and 9 VAC 5-60-300 C,D, and E, if the facility emits or may emit any toxic pollutant (defined at 9 VAC 5-60-210 and 9 VAC 5-60-310) the provisions of 9 VAC Chapter 60, Part II, Articles 4 and 5, Emissions Standards for Toxic Pollutants from Existing Sources (Rule 6-4) and Emission Standards for Toxic Pollutants from New and Modified Sources (Rule 6-5), respectively, apply.
   (9 VAC 5-60-200 and 9 VAC 5-60-300)

# Appendix A

[from PSD/NSR permit issued October 5, 2001 (amended November 18, 2002 and December 8, 2004)]

# Possum Point Combined Cycle GE 7FA Combustion Turbines (Units 6A & 6B) Startup and Shutdown Definitions

## **Startup** is one of the three following types of start conditions, as applicable:

# **Cold Start**

• A cold start is defined as the process of commencing ignition of fuel in the combustion turbine after a shutdown period of forty-eight (48) hours or greater. The period of time (commencing with the ignition of the fuel) required to place the turbine in service at minimum load is five (5) hours.

#### Warm Start

• A warm start is defined as the process of commencing ignition of fuel in the combustion turbine after a shutdown period greater than eight (8) hours and less than forty-eight (48) hours. The period of time (commencing with the ignition of the fuel) required to place the turbine in service at minimum load is four (4) hours.

#### **Hot Start**

• A hot start is defined as the process of commencing ignition of fuel in the combustion turbine after a shutdown period lasting less than eight (8) hours. The period of time (commencing with the ignition of the fuel) required to place the turbine in service at minimum load is three (3) hours.

## Shutdown is the following type of shutdown process:

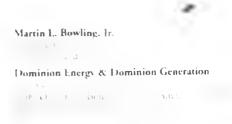
#### Planned Shutdown

A shutdown is defined as the process of suspending the ignition of fuel in the
combustion turbine for the purpose of removing the unit from service. A typical
shutdown while operating at minimum load will see the combustion turbine operating
below minimum load for less than one hour until the fuel supply is shut off. For
purposes of determining compliance, a shutdown is the period of time required to
remove the turbine from service and is one (1) hour excluding partial operating
hours.

# Appendix B

# To Dominion's Possum Point Power Station Title V Permit

Letter from Martin J. Bowling, Jr., to Alice G. Nelson,
Dated September 29, 2000,
Stating Details of Monitoring, Recordkeeping and Reporting
For RACT



#### **OVERNIGHT MAIL**

September 29, 2000

Ms. Alice G. Nelson Air Compliance Manager Department of Environmental Quality Northern Virginia Air Regional Office 13901 Crown Court Woodbridge, Virginia 22193

Re: Possum Point Power Station, Registration Number 70225

NO<sub>x</sub> RACT Emissions Reporting

Dear Ms. Nelson:

In accordance with Dominion Generation's program at Possum Point Power Station for demonstrating compliance with the NO<sub>X</sub> RACT permit approved by the Department of Environmental Quality (DEQ) on July 21, 2000; Dominion Generation, formally Virginia Power, is submitting the enclosed proposed compliance reporting format that will be used to satisfy permit Condition 10.

Raw emissions data are monitored and quality assured by the station's continuous emissions monitoring system (CEMS) in accordance with the requirements of 40 CFR Part 75. To ensure compliance with Conditions 3, 5, and 7 of the permit, the data will be processed and reported in accordance with the requirements of 40 CFR Part 60. The compliance reports will be submitted 30 days after the end of the ozone season until notification that this permit has been approved for inclusion into the SIP (as specified in Condition 6), after which, the reports will be submitted 30 days after the end of the appropriate quarter. Attached are copies of the following reports:

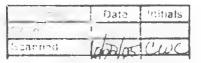
Daily Rolling Average Reports:
Calendar day for Unit 3 and Unit 4
30-Day for Unit 5
Summary Reports
Excess Emissions Duration Reports
Downtime Duration Report
Daily Calibration Error Test Reports

Please note that the data on these reports are sample data only.





Northern VA. Region Dept. of Env. Quality



Ms. Alice G. Nelson Page 2 September 29, 2000

The new proposed format for the  $NO_X$  RACT Reports differs from the previous  $NO_X$  RACT Report, which was effective through July 20, 2000. The old report format was developed in-house on our corporate mainframe computer platform using data stored in the corporate CEMS database. The corporate CEMS database consists of data transferred from the station CEMS each business day. We are striving to move those reports to the CEMS data acquisition and handling system (DAHS) computer at the station so that all of the reporting tools are easily available to station personnel. These new reports are products developed by our CEMS DAHS vendor and are used for other state permit and Part 60 reporting as well. The required quarterly and annual CEMS quality assurance test results are not included in these reports since they are already submitted to your office routinely.

5

In referring to specifics of the reports, an operating hour is one in which there is fire in the boiler. For Unit 3 and Unit 4, the calendar day averaging scheme remains the same as before. A valid calendar day consists of a minimum of 18 operating hours of valid data. A valid daily average is the average of all valid hourly readings during a valid calendar day. For the previous 8760 unit operating hours, our current data capture rates are greater than 99% for Unit 3 and Unit 4, and greater than 94% for Unit 5. For Unit 5, based on Condition 9 of the permit, an operating day is one in which the unit operated at least one hour. A valid 30-day rolling average consists of all valid data points during the last 30 operating-day period. This averaging scheme was confirmed on September 22, 2000, by telephone conversation between you and Mr. Frank Jacocks of Dominion Generation. Also, based on guidance from Mr. John McKie of DEQ, the calculation of Unit 5's 30-day rolling average should begin with the data collected on July 21, 2000. Unit 3 and Unit 4 data reporting will begin with the July 21, 2000 data as well.

If you have any questions concerning this reporting format proposal, please contact Mr. Frank Jacocks of our Emissions Monitoring Support Group at (804) 796-6033.

Very truly yours,

Martin L. Bowling, Jr.

My Burling

**Enclosures** 

cc: Mr. John McKie, Air Permits, DEQ

# Appendix B

# To Dominion's Possum Point Power Station Title V Permit

Letter from Martin J. Bowling, Jr., to Alice G. Nelson,
Dated September 29, 2000,
Stating Details of Monitoring, Recordkeeping and Reporting
For RACT

# Appendix C

# To Dominion's Possum Point Power Station Title V Permit

Consent Decree Issued October 10, 2003 C. D. Holley Vice President Fossil & Hydro

**Dominion Generation**Innsbrook Technical Center

Innsbrook Technical Center 5000 Dominion Boulevard, Glen Allen, VA 23060

# **CERTIFIED MAIL**

January 16, 2008

To: Regional Directors

Virginia Department of Environmental Quality

**Re:** Virginia Electric and Power Company

**Revised NOx Compliance Plans and NOx Averaging Plans** 

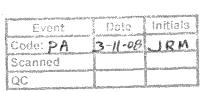
Dear Sir or Madam:

A revised Phase II NO<sub>x</sub> Averaging Plan for Virginia Electric and Power Company's Bremo Power Station, Chesapeake Energy Center, Chesterfield Power Station, Clover Power Station, Possum Point Power Station, and Yorktown Power Station is enclosed. The revised NO<sub>x</sub> Compliance Plan for each facility was submitted to the appropriate DEQ Region when the Title IV (Acid Rain) Permit renewal applications were submitted in August 2007. Those documents are being resubmitted under the signature of Dominion Generation's newly-appointed Designated Representative, C. D. Holley.

All units in the averaging plan: are owned by Virginia Electric and Power Company and operated by Dominion Generation (Clover Power Station is jointly owned with the Old Dominion Electric Cooperative and is operated by Dominion Generation); are located in the Commonwealth of Virginia; and, are under the authority of Mr. Charles D. Holley, Designated Representative. The Averaging Plan includes the following units: Units 3 and 4 at Bremo Power Station, Units 1, 2, 3, and 4 at Chesapeake Energy Center, Units 3, 4, 5, and 6 at Chesterfield Power Station, Units 1 and 2 at Clover Power Station, Units 3 and 4 at Possum Point Power Station, and Units 1 and 2 at Yorktown Power Station.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.





JAN 2 3 2008 DEPT. OF ENVIRONMENTAL QUALITY-NRO January 16, 2008 Regional Directors Page 2

If you have any questions about this submittal, please contact Phil Knause at (804) 796-6033 or Philip.Knause@Dom.com.

Very truly yours,

C. D. Holley

Designated Representative

Distribution:

#### **Bremo**

Amy Thatcher Owens Regional Director Valley Regional Office 4411 Early Road P.O. Box 3000 Harrisonburg, VA 22801

# Chesapeake, Yorktown

Frank Daniel Regional Director Tidewater Regional Office 5636 Southern Blvd. Virginia Beach, VA 23462

#### Chesterfield

cc:

Gerard Seeley Jr. Regional Director Piedmont Regional Office 4949-A Cox Road Glen Allen, VA 23060

U.S. Environmental Protection Agency Clean Air Markets Division (6204J) Attn: Phase II NOX 1200 Pennsylvania Ave., NW

Washington, DC 20460

#### Clover

Thomas Henderson Regional Director South Central Regional Office 7705 Timberlake Road Lynchburg, VA 24502

#### **Possum Point**

Thomas A. Faha Regional Director Northern Regional Office 13901 Crown Court Woodbridge, VA 22193 Plant Name



# Phase II NO<sub>x</sub> Compliance Plan

Page 1 of 2

ORIS Code

State

For more information, see Instructions and refer to 40 CFR 76.9
This submission is: New X Revised

I name, IS code Possum Point VA 3804

STEP 1 Indicate plant name, State, and ORIS code from NADB, if applicable

STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID:	Т	<b>4</b> ID# <b>T</b> Type	ID# Type	ID# Type	ID#	ID# Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)						
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner bollers)						
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone bollers)						
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	X	X				
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(I) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO Averaging Plan box and include NO <sub>x</sub> Averaging form)						

Possum Point Plant Name (from Step 1)						NO <sub>x</sub> Compliance - Page 2 Page 2 of 2	
	3 ID# T	<b>4</b> ID#  Type	ID# Type	ID# Type	ID#	ID# Type	
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2	<u> </u>						
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)							
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA demonstration period ongoing	or						
(p) Repowering extension plan approved or under review							

STEP 3
Read the standard
requirements and
certification, enter the
name of the designated
representative, sign &

#### Standard Requirements

<u>General</u>. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

#### Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii). Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	C. D. Holley	
Signature	A Holley	Date 01/15/2008



# **Acid Rain Program**Instructions for Phase II NO<sub>X</sub> Compliance Plan (40 CFR 76.9)

The U.S. Environmental Protection Agency has promulgated regulations designed to substantially reduce the annual emissions of nitrogen oxides ( $NO_x$ ) from coal-fired electric utilities. The  $NO_x$  Emission Reduction regulations are found at 40 CFR part 76 and apply to each existing coal-fired utility unit that is subject to sulfur dioxide ( $SO_2$ ) emission reduction requirements under Sections 404, 405, or 409 of the Clean Air Act. Under 40 CFR 76.9, the owner or operator of each affected unit subject to 40 CFR part 76 must include a compliance plan for  $NO_x$  emissions in the Acid Rain permit application for that unit. The designated representatives (DRs) of Phase I and Phase II NOx-affected units with Group 1 or Group 2 boilers must submit an initial Phase II  $NO_x$  compliance plan to the appropriate title V air permitting authority (in most cases, the State or local air permitting authority) not later than **January 1, 1998**. A Group 1 boiler is a tangentially fired boiler or a dry bottom wall-fired boiler. A Group 2 boiler is a cell burner boiler, cyclone boiler, vertically fired boiler, or a wet bottom boiler. Once the title V permitting authority receives the Phase II  $NO_x$  compliance plans, it will in turn review them and incorporate approved plans into the Phase II Acid Rain permits issued by the permitting authority to Phase II affected sources.

# General Instructions

- Please type or print in black ink.
- (2) NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 343-9620. This data file is in dBase format for use on an IBMcompatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS code, and boiler ID#(s) listed on the Certificate of Representation for the affected source.
- (3) If more space is needed, photocopy the pertinent page. When you have completed the form, indicate the page order and total number of pages (e.g., 1 of 4, 2 of 4, etc.) in the boxes in the upper right hand corner of each page.
- (4) Submit one complete set of all forms with original signatures to:

(a) The appropriate title V permitting authority (for NO<sub>X</sub> Averaging Plans, a copy of the plan must be submitted to any other title V permitting authority with jurisdiction over any of the units in the plan).

#### <u>and</u>

#### One copy to:

- (b) U.S. Environmental Protection Agency Clean Air Markets Division (6204J) Attn: Phase II NO<sub>x</sub> 1200 Pennsylvania Ave., NW Washington, DC 20460
- (5) For assistance, call the Acid Rain Hotline at (202) 343-9620.

# NO<sub>x</sub> Compliance Options

#### STEP 2

#### General

Indicate a proposed method of compliance with the  $NO_\chi$  emissions requirements for each unit at the source affected for  $NO_\chi$  during Phase II. A Phase II NO $_\chi$  compliance plan must account for each year the Phase II acid rain permit will be effective. Further, a  $NO_\chi$  compliance plan is in effect only through the term of the acid rain permit covering the  $NO_{\chi^-}$  affected units. A new  $NO_\chi$  compliance plan must be submitted when an acid rain permit renewal application is due.

#### NO<sub>x</sub>-affected Units

To determine if an affected unit subject to Acid Rain  $SO_2$  requirements is also subject to  $NO_X$  emission limitations, see 40 CFR 76.1, the definitions at 40 CFR 76.2, and the emission limitations at 40 CFR 76.5, 76.6, and 76.7. Most existing coal-fired units that are subject to Acid Rain  $SO_2$  requirements and that have a Group 1 or Group 2 boiler are also subject to the  $NO_X$  emission limitations under 40 CFR part 76.

#### Phase I Group 1 Boilers

Compliance options (a) and (b) are standard annual emission limitations, one of which may be selected for a Phase I Group 1 boiler. The limits also apply to Phase II Group 1 boilers that are covered by an early election plan previously approved by U.S. EPA.

#### Early Election

Compliance option (c), NO<sub>x</sub> early election, is available only to Phase II Group 1 boilers with early election plans submitted by January 1, 1997 and approved by U.S. EPA. All such plans terminate no later than December 31, 2007. DRs with NO<sub>x</sub> early election units must select option (c) and either (a) or (b), the Phase I Group 1 standard emissions limit specified for the unit in the plan. If the termination date of the plan will be prior to the expiration date of the acid rain permit covering an early election unit, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the unit beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (c) and either (a) or (b), as well as the additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option. For early election units in a common stack, see also the instructions under Common Stacks.

#### Phase II Group 1 Boilers

Compliance options (d) and (e) denote standard annual emission limitations, one of which may be selected for a Phase II Group 1 boiler.

#### Phase II Group 2 Boilers

Compliance options (f) through (i) denote standard annual emission limitations, one of which may be selected for a Phase II Group 2 boiler.

#### NO<sub>x</sub> Averaging

Compliance option (j) denotes the annual emission limitation under a  $NO_X$  averaging plan, which may be selected in lieu of a standard annual emission limit for Group 1 or Group 2 boilers with the same owner or operator and the same DR. See instructions below and include Phase II  $NO_X$  averaging form.

#### Common Stacks

A unit that utilizes a common stack and is separately monitored for  $NO_{\chi}$  (i.e, has its own  $NO_{\chi}$  monitor and diluent monitor) is treated as the same as a unit that emits only through its own separate stack.

A unit (other than an early election unit) that utilizes a common stack and is <u>not</u> monitored separately must select one of the applicable common stack options. If the unit shares a common stack with other affected units and no non-affected units and if each of the units has a  $NO_X$  emission limitation, three options are available: comply with the most stringent  $NO_X$  emission limitation applicable

to any unit utilizing the common stack (option (k)); include the units in a  $\mathrm{NO}_{\mathrm{X}}$  averaging plan (option (I)); or use an approved method for apportioning the combined  $\mathrm{NO}_{\mathrm{X}}$  emission rate in the common stack (option (m)). If the unit shares a common stack with at least one other unit that does not have a  $\mathrm{NO}_{\mathrm{X}}$  emission limitation or with at least one non-affected unit, you must use an approved method for apportioning the combined  $\mathrm{NO}_{\mathrm{X}}$  emission rate (option (m)), unless, of course, the unit is separately monitored. An early election unit that utilizes a common stack, that is not monitored separately, and whose early election plan specifies option (k) or (m) for the unit, must select such option.

If an apportionment option is chosen, check, in addition to option (m), the box at Step 2 that indicates the applicable emission limitation and submit to U.S. EPA the documentation supporting apportionment with the monitoring plan submission.

#### Alternative Emissions Limitations

Compliance option (n) must be selected by a Phase II Group 1 or Group 2 boiler that is applying for an AEL demonstration period, or final AEL, starting in Phase II. Compliance option (n) must also be chosen by a boiler that is renewing for Phase II a final AEL approved by U.S. EPA (see instructions accompanying Phase II AEL Demonstration Period, Final AEL Petition, and AEL Renewal forms and include appropriate form).

Compliance option (o) must be selected by a boiler that has applied to U.S. EPA for an AEL demonstration period or final AEL which is undergoing review by U.S. EPA. If a final AEL is subsequently approved by U.S. EPA, a revised Phase II  $NO_\chi$  compliance plan must be submitted marking option (o) and attaching an AEL Renewal form. If an AEL demonstration period or final AEL is subsequently disapproved by U.S. EPA, a revised Phase II  $NO_\chi$  compliance plan must be submitted indicating which Phase II  $NO_\chi$  compliance option will be used by the boiler.

#### Repowering Extension Plans

Compliance option (p) must be selected by a boiler that is covered by either an approved repowering extension plan or a plan that is undergoing review. If a repowering extension plan undergoing review is subsequently disapproved, a revised Phase II NO<sub>x</sub> compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler. If the termination date of either the repowering extension plan undergoing review or the approved plan is prior to the expiration date of the acid rain permit covering the repowered (or replacement) boiler under the plan, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the boiler beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (p), as well as additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option.

# NO<sub>x</sub> Averaging Plan

Under 40 CFR 76.11 any affected units under control of the same owner or operator and with the same designated representative may average their  $NO_X$  emission rate, rather than each unit complying on an individual-unit basis with the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7. Units with no common owner or operator may not average their emissions. You may submit an averaging plan (or a revision to an approved averaging plan) with the appropriate title V permitting authority(s) at any time up to and including January 1 of the calendar year for which the averaging plan will become effective. If the plan is restricted to units located within a single permitting authority's jurisdiction, you may submit the plan at any time up to and including July 1 of the calendar year for which the plan will become effective.

#### STEP 1

Each unit identified for inclusion in the averaging plan in Phase II must be a Group 1 or Group 2 boiler subject to an emission limitation under 40 CFR 76.5, 76.6, or 76.7. Enter each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7 in column (a). If a unit with an alternative emission limitation demonstration period or a final alternative emission limitation under 40 CFR 76.10 participates in an averaging plan, enter the applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7, not the interim or alternative limit, in column (a).

For units utilizing a common stack that are averaging pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation must be entered in column (b) for each unit utilizing the common stack. Different annual heat input limits may be entered for these units in column (c). Units not utilizing the common stack may also be included in the averaging plan with the common stack units.

The annual heat input limit entered at column (c) will be a minimum limit if the value in column (b) is less than the value in column (a) for that unit. It will be a maximum limit if the value in column (b) is greater than the value in column (a). The values entered for each unit at columns (b) and (c) must satisfy the formula at Step 2.

#### STEP 2

The entries in Step 2 must demonstrate that the Btu-weighted annual emission rate averaged over the units in the plan is less than or equal to the Btu-weighted annual average emission rate for the same units if they are each operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7. Use the equation that appears in Step 2 to demonstrate that the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in Step 1 satisfy this criterion. For units with an interim emission limitation or an alternative emission limitation, the applicable emission limitation for the equation shall equal the applicable emissions limitation under 40 CFR 76.5, 76.6, or 76.7.

#### STEP 3

The second option is included to avoid the need to submit identical plans each for a different year if you want each plan to be effective for only one year.

#### Paperwork Burden Estimate

The burden on the public for collecting and reporting of information under this request is fixed per response indicated. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. **Do not send your forms to these addresses; see paragraph** (4) of the General Instructions on Page 1 for form submission information.

FORM	HOURS
NO <sub>x</sub> Compliance Plan	10
NO <sub>x</sub> Averaging Plan	200



# Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: New X Revised

Page 1 of 2

#### STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

			(a)	(b)	(c)
Plant Name	State	ID#	Emission Limitation	ACEL	Annual Heat Input Limit
Bremo	VA	3	0.46	0.80	6,857,000
Bremo	VA	4	0.46	0.46	8,712,000
Chesapeake	VA	1	0.40	0.55	9,750,000
Chesapeake	VA	2	0.40	0.55	10,090,000
Chesapeake	VA	3	0.46	0.35	9,585,000
Chesapeake	VA	4	0.40	0.35	12,093,000
Chesterfield	VA	3	0.40	0.55	8,802,000
Chesterfield	VA	4	0.40	0.25	8,371,000
Chesterfield	VA	5	0.40	0.25	18,990,000

#### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.40

 $\frac{\sum_{i=1}^{n} (R_{Li} \times HI_{i})}{\sum_{i=1}^{n} HI_{i}}$ 

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.41

$$\frac{\sum_{i=1}^{n} [R_{li} \times HI_{i}]}{\sum_{i=1}^{n} HI_{i}}$$

Where,

R<sub>Li</sub> = Alternative contemporaneous annual emission limitation for unit i, in

≤

lb/mmBtu, as specified in column (b) of Step 1:

R<sub>ii</sub> = Applicable emission limitation for unit i, in lb/mmBtu, as specified in

column (a) of Step 1;
HI = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;

n = Number of units in the averaging plan

	Possum Point
	Plant Name (from Step 1) NO <sub>x</sub> Averaging - Page 2
	This plan is effective for calendar year through calendar year
STEP 3	Vanished .
Mark one of the two options and enter dates.	unless notification to terminate the plan is given.
	X Treat this plan as 5 identical plans, each effective for one calendar year for the following
	calendar years: 2008, 2009, 2010, 2011 and 2012 unless notification to terminate
	one or more of these plans is given.
STEP 4	Special Provisions
Read the special	Emission Limitations
provisions and certification, enter the name of the designated	Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO, under the plan only if the following requirements are met:
representative, and sign and date.	(i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan, (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable
	emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFF 76.5, 76.6, or 76.7.  (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendary.
	year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).
	Liability
	The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.
	<u>Termination</u>
	The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.
	Certification
	I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and an familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information including the possibility of fine or imprisonment.
	Name C. D. Holley

Date 01/15/2008

Signature

Plant Name (from Step 1)

(a) (b) (c)

Alt. ontemp.

# STEP 1

Continue the identification of units from Step 1, page 1, here.

Plant Name	State	ID#	Emission Limitation	Contemp. Emission Limitation	Annual Heat Input Limit
Chesterfield	VA	6	0.40	0.25	30,177,000
Clover	VA	1	0.40	0.34	30,184,000
Clover	VA	2	0.40	0.34	31,864,000
Possum Point	VA	3	0.40	0.30	490,000
Possum Point	VA	4	0.40	0.30	926,000
Yorktown	VA	1	0.40	0.55	20,024,000
Yorktown	VA	2	0.40	0.55	17,924,000



# **Acid Rain Program**Instructions for Phase II NO<sub>X</sub> Compliance Plan (40 CFR 76.9)

The U.S. Environmental Protection Agency has promulgated regulations designed to substantially reduce the annual emissions of nitrogen oxides ( $NO_x$ ) from coal-fired electric utilities. The  $NO_x$  Emission Reduction regulations are found at 40 CFR part 76 and apply to each existing coal-fired utility unit that is subject to sulfur dioxide ( $SO_2$ ) emission reduction requirements under Sections 404, 405, or 409 of the Clean Air Act. Under 40 CFR 76.9, the owner or operator of each affected unit subject to 40 CFR part 76 must include a compliance plan for  $NO_x$  emissions in the Acid Rain permit application for that unit. The designated representatives (DRs) of Phase I and Phase II  $NO_x$ -affected units with Group 1 or Group 2 boilers must submit an initial Phase II  $NO_x$  compliance plan to the appropriate title V air permitting authority (in most cases, the State or local air permitting authority) not later than **January 1, 1998**. A Group 1 boiler is a tangentially fired boiler or a dry bottom wall-fired boiler. A Group 2 boiler is a cell burner boiler, cyclone boiler, vertically fired boiler, or a wet bottom boiler. Once the title V permitting authority receives the Phase II  $NO_x$  compliance plans, it will in turn review them and incorporate approved plans into the Phase II Acid Rain permits issued by the permitting authority to Phase II affected sources.

# General Instructions

- (1) Please type or print in black ink.
- (2) NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 343-9620. This data file is in dBase format for use on an IBMcompatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS code, and boiler ID#(s) listed on the Certificate of Representation for the affected source.
- (3) If more space is needed, photocopy the pertinent page. When you have completed the form, indicate the page order and total number of pages (e.g., 1 of 4, 2 of 4, etc.) in the boxes in the upper right hand corner of each page.
- (4) Submit one complete set of all forms with original signatures to:

(a) The appropriate title V permitting authority (for NO<sub>x</sub> Averaging Plans, a copy of the plan must be submitted to any **other** title V permitting authority with jurisdiction over any of the units in the plan).

#### and

#### One copy to:

- (b) U.S. Environmental Protection Agency Clean Air Markets Division (6204J) Attn: Phase II NO<sub>x</sub> 1200 Pennsylvania Ave., NW Washington, DC 20460
- (5) For assistance, call the Acid Rain Hotline at (202) 343-9620.

# NO<sub>x</sub> Compliance Options

#### STEP 2

#### **General**

Indicate a proposed method of compliance with the  $NO_{\chi}$  emissions requirements for each unit at the source affected for  $NO_{\chi}$  during Phase II. A Phase II NO $_{\chi}$  compliance plan must account for each year the Phase II acid rain permit will be effective. Further, a  $NO_{\chi}$  compliance plan is in effect only through the term of the acid rain permit covering the  $NO_{\chi^-}$  affected units. A new  $NO_{\chi}$  compliance plan must be submitted when an acid rain permit renewal application is due.

#### NO<sub>x</sub>-affected Units

To determine if an affected unit subject to Acid Rain  $SO_2$  requirements is also subject to  $NO_X$  emission limitations, see 40 CFR 76.1, the definitions at 40 CFR 76.2, and the emission limitations at 40 CFR 76.5, 76.6, and 76.7. Most existing coal-fired units that are subject to Acid Rain  $SO_2$  requirements and that have a Group 1 or Group 2 boiler are also subject to the  $NO_X$  emission limitations under 40 CFR part 76.

#### Phase I Group 1 Boilers

Compliance options (a) and (b) are standard annual emission limitations, one of which may be selected for a Phase I Group 1 boiler. The limits also apply to Phase II Group 1 boilers that are covered by an early election plan previously approved by U.S. EPA.

#### Early Election

Compliance option (c), NO<sub>x</sub> early election, is available only to Phase II Group 1 boilers with early election plans submitted by January 1, 1997 and approved by U.S. EPA. All such plans terminate no later than December 31, 2007. DRs with NO<sub>x</sub> early election units must select option (c) and either (a) or (b), the Phase I Group 1 standard emissions limit specified for the unit in the plan. If the termination date of the plan will be prior to the expiration date of the acid rain permit covering an early election unit, the DR must indicate an additional NO<sub>v</sub> compliance option that will apply to the unit beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (c) and either (a) or (b), as well as the additional box(es) denoting the additional, follow-on NOx compliance option. For early election units in a common stack, see also the instructions under Common Stacks.

#### Phase II Group 1 Boilers

Compliance options (d) and (e) denote standard annual emission limitations, one of which may be selected for a Phase II Group 1 boiler.

#### Phase II Group 2 Boilers

Compliance options (f) through (i) denote standard annual emission limitations, one of which may be selected for a Phase II Group 2 boiler.

#### NO<sub>x</sub> Averaging

Compliance option (j) denotes the annual emission limitation under a  $\mathrm{NO}_{\mathrm{X}}$  averaging plan, which may be selected in lieu of a standard annual emission limit for Group 1 or Group 2 boilers with the same owner or operator and the same DR. See instructions below and include Phase II  $\mathrm{NO}_{\mathrm{X}}$  averaging form.

#### Common Stacks

A unit that utilizes a common stack and is separately monitored for  $NO_X$  (i.e, has its own  $NO_X$  monitor and diluent monitor) is treated as the same as a unit that emits only through its own separate stack.

A unit (other than an early election unit) that utilizes a common stack and is <u>not</u> monitored separately must select one of the applicable common stack options. If the unit shares a common stack with other affected units and no non-affected units and if each of the units has a  $NO_\chi$  emission limitation, three options are available: comply with the most stringent  $NO_\chi$  emission limitation applicable

to any unit utilizing the common stack (option (k)); include the units in a  $\mathrm{NO}_{\mathrm{X}}$  averaging plan (option (I)); or use an approved method for apportioning the combined  $\mathrm{NO}_{\mathrm{X}}$  emission rate in the common stack (option (m)). If the unit shares a common stack with at least one other unit that does not have a  $\mathrm{NO}_{\mathrm{X}}$  emission limitation or with at least one non-affected unit, you must use an approved method for apportioning the combined  $\mathrm{NO}_{\mathrm{X}}$  emission rate (option (m)), unless, of course, the unit is separately monitored. An early election unit that utilizes a common stack, that is not monitored separately, and whose early election plan specifies option (k) or (m) for the unit, must select such option.

If an apportionment option is chosen, check, in addition to option (m), the box at Step 2 that indicates the applicable emission limitation and submit to U.S. EPA the documentation supporting apportionment with the monitoring plan submission.

#### **Alternative Emissions Limitations**

Compliance option (n) must be selected by a Phase II Group 1 or Group 2 boiler that is applying for an AEL demonstration period, or final AEL, starting in Phase II. Compliance option (n) must also be chosen by a boiler that is renewing for Phase II a final AEL approved by U.S. EPA (see instructions accompanying Phase II AEL Demonstration Period, Final AEL Petition, and AEL Renewal forms and include appropriate form).

Compliance option (o) must be selected by a boiler that has applied to U.S. EPA for an AEL demonstration period or final AEL which is undergoing review by U.S. EPA. If a final AEL is subsequently approved by U.S. EPA, a revised Phase II  $\rm NO_x$  compliance plan must be submitted marking option (o) and attaching an AEL Renewal form. If an AEL demonstration period or final AEL is subsequently disapproved by U.S. EPA, a revised Phase II  $\rm NO_x$  compliance plan must be submitted indicating which Phase II  $\rm NO_x$  compliance option will be used by the boiler.

#### Repowering Extension Plans

Compliance option (p) must be selected by a boiler that is covered by either an approved repowering extension plan or a plan that is undergoing review. If a repowering extension plan undergoing review is subsequently disapproved, a revised Phase II NOx compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler. If the termination date of either the repowering extension plan undergoing review or the approved plan is prior to the expiration date of the acid rain permit covering the repowered (or replacement) boiler under the plan, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the boiler beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (p), as well as additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option.

# NO<sub>x</sub> Averaging Plan

Under 40 CFR 76.11 any affected units under control of the same owner or operator and with the same designated representative may average their  $NO_X$  emission rate, rather than each unit complying on an individual-unit basis with the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7. Units with no common owner or operator may not average their emissions. You may submit an averaging plan (or a revision to an approved averaging plan) with the appropriate title V permitting authority(s) at any time up to and including January 1 of the calendar year for which the averaging plan will become effective. If the plan is restricted to units located within a single permitting authority's jurisdiction, you may submit the plan at any time up to and including July 1 of the calendar year for which the plan will become effective.

#### STEP 1

Each unit identified for inclusion in the averaging plan in Phase II must be a Group 1 or Group 2 boiler subject to an emission limitation under 40 CFR 76.5, 76.6, or 76.7. Enter each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7 in column (a). If a unit with an alternative emission limitation demonstration period or a final alternative emission limitation under 40 CFR 76.10 participates in an averaging plan, enter the applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7, not the interim or alternative limit, in column (a).

For units utilizing a common stack that are averaging pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation must be entered in column (b) for each unit utilizing the common stack. Different annual heat input limits may be entered for these units in column (c). Units not utilizing the common stack may also be included in the averaging plan with the common stack units.

The annual heat input limit entered at column (c) will be a minimum limit if the value in column (b) is less than the value in column (a) for that unit. It will be a maximum limit if the value in column (b) is greater than the value in column (a). The values entered for each unit at columns (b) and (c) must satisfy the formula at Step 2.

#### STEP 2

The entries in Step 2 must demonstrate that the Btu-weighted annual emission rate averaged over the units in the plan is less than or equal to the Btu-weighted annual average emission rate for the same units if they are each operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7. Use the equation that appears in Step 2 to demonstrate that the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in Step 1 satisfy this criterion. For units with an interim emission limitation or an alternative emission limitation, the applicable emission limitation for the equation shall equal the applicable emissions limitation under 40 CFR 76.5, 76.6, or 76.7.

#### STEP 3

The second option is included to avoid the need to submit identical plans each for a different year if you want each plan to be effective for only one year.

# Paperwork Burden Estimate

The burden on the public for collecting and reporting of information under this request is fixed per response indicated. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. **Do not send your forms to these addresses; see paragraph** (4) of the General Instructions on Page 1 for form submission information.



## Certified Mail - Return Receipt Requested

June 22, 2007

Mr. Terry H. Darton Air Permit Manager Virginia Department of Environmental Quality Northern Virginia Regional Office 13901 Crown Court Woodbridge, VA 22193 JUN 2 5 2007

TRM 075

Northern Va. Region

Dept. of Env. Quality

Re: Phase II Acid Rain Permit Renewal
Dominion - Possum Point Power Station

DEQ Air Reg. 70225

Dear Mr. Darton:

A Phase II Acid Rain Permit Application, required to renew the existing permit for Possum Point Power Station, is enclosed. The existing permit expires December 31, 2007. A copy of the Certificate of Representation report from the CAMD website has also been included for your reference.

Attached to the permit application are the Phase II NO<sub>x</sub> Compliance Plan and the Phase II NO<sub>x</sub> Averaging Plan. The averaging plan includes the years 2008 through 2012 to coincide with the Acid Rain Permit. All units in the averaging plan, with the exception of those at Clover Power Station, are owned by Virginia Electric and Power Company and are operated by Dominion Generation. Clover Power Station is jointly owned with the Old Dominion Electric Cooperative and is operated by Dominion Generation. All of these units are located in the Commonwealth of Virginia and are under the authority of Mr. J. David Rives, Designated Representative. The Averaging Plan includes the following units: Units 3 and 4 at Bremo Power Station, Unit 3 at Chesapeake Energy Center, Units 5 and 6 at Chesterfield Power Station, Units 1 and 2 at Clover Power Station, and Unit 4 at Possum Point Power Station.

If you have any questions, please feel free to contact Dawn Garber at (804) 273-3912 or dawn.k.garber@dom.com.

Sincerely,

Cathy C. Taylor

Director, Environmental Support

Enclosure: Possum Point Power Station Acid Rain Permit Renewal Forms

cc: EPA Clean Air Markets Division – Washington, DC

Mr. Jerome Curtin, Clean Air Markets Division – Region III Contact



# **Acid Rain Permit Application**

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: 

New 

Revised

#### STEP 1

Identify the source by plant name, State, and ORIS code.

Dominion-Possum Point Power Station	VA	3804	
Plant Name	State	ORIS Code	

#### STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

а	b	С	d	
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline	
3	Yes			
4	Yes			
5	Yes			
6A	Yes			
6B	Yes			
	Yes			

Dominion-Possum Point Power Station
Plant Name (from Step 1)

## **Permit Requirements**

#### STEP 3

Read the standard requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

## Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

## **Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
    - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3, Cont'd.

<u>Nitrogen Oxides Requirements</u> The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

### **Excess Emissions Requirements**

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

## Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

## **Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Dominion-Possum Point Power Station
Plant Name (from Step 1)

Step 3, Cont'd.

## Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO $_{\rm x}$  averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative

of such source or unit, shall be a separate violation of the Act.

## **Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any

other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy

Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

## STEP 4 <u>Certification</u>

Read the certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name J.	David Rives	
Signature	J. A. BRUS	Date Jus 24, 2007



# Phase II NO<sub>x</sub> Compliance Plan

Page 1 of 2

For more information, see instructions and refer to 40 CFR 76.9 This submission is: New X Revised STEP 1 Indicate plant name, State, and ORIS code from NADB, if applicable VA 3804 Dominion - Possum Point Power Station Plant Name State **ORIS Code** Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit. STEP 2 3 4 ID# ID# ID# ID# ID# ID# T Τ Туре Туре Туре Туре Туре Туре (a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers) (b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers) X (c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan) X (d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers) (e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers) (f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers) (g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers) (h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers) (i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers) (j) NO<sub>x</sub> Averaging Plan (include NO<sub>x</sub> Averaging form) X. (k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack) (I) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO<sub>x</sub> Averaging (check the NO Averaging Plan box and include NO<sub>x</sub> Averaging form)

	Dominion - Plant Name (from	Possum Point Po	ower Station		NO <sub>x</sub> Co	ompliance - Page 2 Page 2 of 2
	ID# 3	<sub>ID#</sub> 4 <sub>Туре</sub> Т	ID#	ID# Type	ID#	ID#
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	)					
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)						
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA demonstration period ongoing	or					
(p) Repowering extension plan approved or under review						

STEP 3
Read the standard
requirements and
certification, enter the
name of the designated
representative, sign &

#### Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

#### Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for  $NO_x$  as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii). Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. David Rives	
Signature	J. AND RIVE	Date ME ZAL BOY



# Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: New

X Revised

Page 1 of 2

#### STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
BREMO	VA	3	0.46	0.80	6,008,230
BREMO	VA	4	0.46	0.45	12,274,185
CHESAPEAKE	VA	3	0.46	0.45	12,583,197
CHESTERFIELD	VA	5	0.40	0.39	25,052,983
CHESTERFIELD	VA	6	0.40	0.39	53,347,435
CLOVER	VA	1	0.40	0.34	35,572,406
CLOVER	VA	2	0.40	0.34	38,786,194
POSSUM POINT	VA	4	0.40	0.39	15,915,853

#### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.39

 $\sum_{n=1}^{\infty} (R \times HT)$ 

$$\sum_{i=1}^{n} HI_{i}$$

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.41

$$\sum_{i=1}^{n} [R_{li} \times HI_{i}]$$

$$\sum_{i=1}^{n} HI_{i}$$

Where,

R<sub>L i</sub> = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1:

R<sub>ii</sub> = Applicable emission limitation for unit i, in lb/mmBtu, as specified in

HI; = Annual heat input for unit i, in mmBtu, as specified in column (c) of

n = Number of units in the averaging plan

Dominion - Possum Point Power Station
Plant Name (from Step 1)

one or more of these plans is given.

NO<sub>x</sub> Averaging - Page 2

#### STEP 3

Mark one of the two options and enter dates.

	This plan is effective for calendar year through calendar year
	unless notification to terminate the plan is given.
	Treat this plan as [5] identical plans, each effective for one calendar year for the following
X	Treat this plan as 5 identical plans, each effective for one calendar year for the following
	calendar years: 2008 , 2009 , 2010 , 2011 and 2012 unless notification to terminate

#### STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

#### **Special Provisions**

#### **Emission Limitations**

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for  $NO_x$  under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and (a) Foreach unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

#### Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

#### **Termination**

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	J. David Rives		
Signature	J. Miss Rus	Date Tvc a	ed 2007



## Reports and Queries

Certificate of Representation 06/05/2007

### **Facility Information**

Facility ID (ORISPL): 3804

Facility Possum Point Power Name: Station

State: VA

County: Prince

**EPA AIRS** 5115300002

**Latitude:** 38.5367

**Longitude:** 77.2806

Facility Detail (Mini Detail)

## Representative Information

Name: Robert B McKinley

Company: Virginia Electric & Power Company

Title: Station Director

Address: 19000 Possum Point Road

City: Dumfries State: VA Zip: 22026

Phone: (703) 441-3880 Fax: (703) 441-3897

Email: Bob.McKinley@Dom.com

Name: J David Rives

Company: Dominion Resources Services, Inc

Title: VP, Fossil and Hydro

Address: 5000 Dominion Boulevard

1 NE

**CAMD Business System** Page 2 of 6

City: Glen Allen State: VA Zip: 23060

Phone: (804) 273-3220 Fax: (804) 273-3714

Email: J.David.Rives@dom.com

People Detail Layout (Multiple)

## **Current Representatives**

Program	Primary Rep Effectiv		Alternate Representative, Effective Date	Primary Representative, End Date	Alternate Representative, End Date		
ARP	J David Rives,	06/15/2005	Robert B McKinley, 05/19/2005				
CAIRNOX	J David Rives,	06/05/2007	Robert B McKinley, 06/05/2007				
CAIROS	J David Rives,	06/05/2007	Robert B McKinley, 06/05/2007				
CAIRSO2	J David Rives,	06/05/2007	Robert B McKinley, 06/05/2007				
NBP	J David Rives,	06/13/2005	Robert B McKinley, 05/19/2005				

Basic Table Layout

## Units

Unit ID	Program	Unit Classification	Operating Status		Source Category	NAICS Code	Commence Operation Date	Commence Operation Date Code	Comm. Commercial Operation Date	Commence Commericial Operation Date Code	Unit Monitor Certification Begin Date
1	ARP	Phase 2	Retired	Т	Electric Utility	Fossil fuel electric power generation		Α	12/20/1948	Α	07/02/1998
1	CAIRNOX	Affected	Retired	T	Electric Utility	Fossil fuel electric power generation	12/20/1948	Α	12/20/1948	A	01/01/2008
1	CAIROS	Affected	Retired	Τ	Electric Utility	Fossil fuel electric power generation	12/20/1948	Α	12/20/1948	A	05/01/2008

CAIRSO2	Affected	Retired	Τ	Electric Utility	electric power		A	12/20/1948	A	01/01/2009
NBP	Affected	Retired	Т	Electric Utility	Fossil fuel electric power generation	12/20/1948	А	12/20/1948	А	
ARP	Phase 2	Retired	Τ	Electric Utility	Fossil fuel electric power generation	05/01/1951	А	05/01/1951	А	07/02/1998
CAIRNOX	Affected	Retired	Т	Electric Utility	Fossil fuel electric power generation	05/01/1951	А	05/01/1951	А	01/01/2008
CAIROS	Affected	Retired	T	Electric Utility	Fossil fuel electric power generation	05/01/1951	А	05/01/1951	А	05/01/2008
CAIRSO2	Affected	Retired	T	Electric Utility	Fossil fuel electric power generation	05/01/1951	А	05/01/1951	А	01/01/2009
NBP	Affected	Retired	Т	Electric Utility	Fossil fuel electric power generation	05/01/1951	А	05/01/1951	А	
ARP	Phase 2	Operating	Т	Electric Utility	Fossil fuel electric power generation	05/21/1955	А	05/21/1955	А	02/06/1995
CAIRNOX	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	05/21/1955	А	05/21/1955	А	01/01/2008
CAIROS	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	05/21/1955	А	05/21/1955	А	05/01/2008
CAIRSO2	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	05/21/1955	А	05/21/1955	А	01/01/2009
	NBP  CAIRNOX  CAIRSO2  NBP  ARP  CAIRNOX  CAIRNOX	ARP Phase 2  CAIRNOX Affected  CAIROS Affected  CAIRSO2 Affected  NBP Affected  ARP Phase 2  CAIRNOX Affected	NBP Affected Retired  ARP Phase 2 Retired  CAIRNOX Affected Retired  CAIROS Affected Retired  NBP Affected Retired  ARP Phase 2 Operating  CAIRNOX Affected Operating  CAIROS Affected Operating	NBP Affected Retired T  ARP Phase 2 Retired T  CAIRNOX Affected Retired T  CAIROS Affected Retired T  CAIRSO2 Affected Retired T  NBP Affected Retired T  ARP Phase 2 Operating T  CAIRNOX Affected Operating T  CAIROS Affected Operating T	NBP Affected Retired T Electric Utility  ARP Phase 2 Retired T Electric Utility  CAIRNOX Affected Retired T Electric Utility  CAIROS Affected Retired T Electric Utility  CAIRSO2 Affected Retired T Electric Utility  NBP Affected Retired T Electric Utility  ARP Phase 2 Operating T Electric Utility  CAIRNOX Affected Operating T Electric Utility  CAIROS Affected Operating T Electric Utility  CAIROS Affected 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NBP	Affected	Operating	ļ.	Electric Utility	Fossil fuel electric power generation	05/21/1955	А	05/21/1955	А	05/30/2004
ARP	Phase 2	Operating	T	Electric Utility	Fossil fuel electric power generation	03/17/1962	А	03/17/1962	А	01/01/1995
CAIRNOX	Affected	Operating	T	Electric Utility	Fossil fuel electric power generation	03/17/1962	А	03/17/1962	А	01/01/2008
CAIROS	Affected	Operating	Τ	Electric Utility	Fossil fuel electric power generation	03/17/1962	А	03/17/1962	А	05/01/2008
CAIRSO2	Affected	Operating	T	Electric Utility	Fossil fuel electric power generation	03/17/1962	А	03/17/1962	А	01/01/2009
NBP	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	03/17/1962	А	03/17/1962	А	05/30/2004
ARP	Phase 2	Operating	T	Electric Utility	Fossil fuel electric power generation	06/28/1975	А	06/28/1975	А	02/07/1995
CAIRNOX	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	06/28/1975	А	06/28/1975	А	01/01/2008
CAIROS	Affected	Operating	Т	Electric Utility	Fossil fuel electric power generation	06/28/1975	А	06/28/1975	А	05/01/2008
CAIRSO2	Affected	Operating	T	Electric Utility	Fossil fuel electric power generation	06/28/1975	А	06/28/1975	А	01/01/2009
NBP	Affected	Operating	Τ	Electric Utility	Fossil fuel electric power generation	06/28/1975	А	06/28/1975	А	05/30/2004
	ARP  CAIRNOX  CAIROS  ARP  CAIRNOX  CAIRNOX  CAIROS	ARP Phase 2  CAIRNOX Affected  CAIROS Affected  NBP Affected  ARP Phase 2  CAIRNOX Affected  CAIRNOX Affected  CAIRNOX Affected  CAIROS Affected	ARP Phase 2 Operating  CAIRNOX Affected Operating  CAIRSO2 Affected Operating  NBP Affected Operating  ARP Phase 2 Operating  CAIRNOX Affected Operating  CAIRNOX Affected Operating  CAIRNOX Affected Operating  CAIRNOX Affected Operating  CAIROS Affected Operating  CAIROS Affected Operating	ARP Phase 2 Operating T  CAIRNOX Affected Operating T  CAIRSO2 Affected Operating T  NBP Affected Operating T  ARP Phase 2 Operating T  CAIRNOX Affected Operating T  CAIRSO2 Affected Operating T	ARP Phase 2 Operating T Electric Utility  CAIRNOX Affected Operating T Electric Utility  CAIROS Affected Operating T Electric Utility  CAIRSO2 Affected Operating T Electric Utility  NBP Affected Operating T Electric Utility  ARP Phase 2 Operating T Electric Utility  CAIRNOX Affected Operating T Electric Utility  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6A	ARP	Phase 2	Operating	СС	Electric Utility	Fossil fuel electric power generation	05/21/2003	А	05/21/2003	A	05/21/2003
6A	CAIRNOX	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	05/21/2003	А	05/21/2003	А	01/01/2008
6A	CAIROS	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	05/21/2003	А	05/21/2003	А	05/01/2008
6A	CAIRSO2	Affected	Operating	СС	Electric Utility	Fossil fuel electric power generation	05/21/2003	А	05/21/2003	А	01/01/2009
6A	NBP	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	05/21/2003	А	05/21/2003	А	05/30/2004
6B	ARP	Phase 2	Operating	CC	Electric Utility	Fossil fuel electric power generation	04/20/2003	А	04/20/2003	А	04/20/2003
6B	CAIRNOX	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	04/20/2003	А	04/20/2003	А	01/01/2008
6B	CAIROS	Affected	Operating	cc	Electric Utility	Fossil fuel electric power generation		А	04/20/2003	А	05/01/2008
6B	CAIRSO2	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	04/20/2003	А	04/20/2003	А	01/01/2009
6B	NBP	Affected	Operating	CC	Electric Utility	Fossil fuel electric power generation	04/20/2003	А	04/20/2003	А	05/30/2004

Basic Table Layout

## **Generator Information**

CAMD Business System Page 6 of 6

Generator ID	Unit ID	ARP Nameplate Capacity	CAIR Nameplate Capacity	Effective Date
3	3	113.6		06/04/2007
6A	6A	174.0	174.0	06/04/2007
1	1	69.0		06/04/2007
4	4	239.4		06/04/2007
2	2	69.0		06/04/2007
5	5	882.0		06/04/2007
6B	6B	174.0	174.0	06/04/2007

Basic Table Layout

## **Current Owners and Operators**

Unit ID	Owner/Operator Company Name	Туре	Effective Date	End Date
1	Dominion Generation	Operator	03/07/2003	
1	Virginia Electric & Power Company	Owner	04/25/2003	
2	Dominion Generation	Operator	03/07/2003	
2	Virginia Electric & Power Company	Owner	04/25/2003	
3	Dominion Generation	Operator	03/07/2003	
3	Virginia Electric & Power Company	Owner	04/25/2003	
4	Dominion Generation	Operator	03/07/2003	
4	Virginia Electric & Power Company	Owner	04/25/2003	
5	Dominion Generation	Operator	03/07/2003	xi
5	Virginia Electric & Power Company	Owner	04/25/2003	
6A	Dominion Generation	Operator	03/07/2003	
6A	Virginia Electric & Power Company	Owner	04/25/2003	
6B	Dominion Generation	Operator	03/07/2003	
6B	Virginia Electric & Power Company	Owner	04/25/2003	

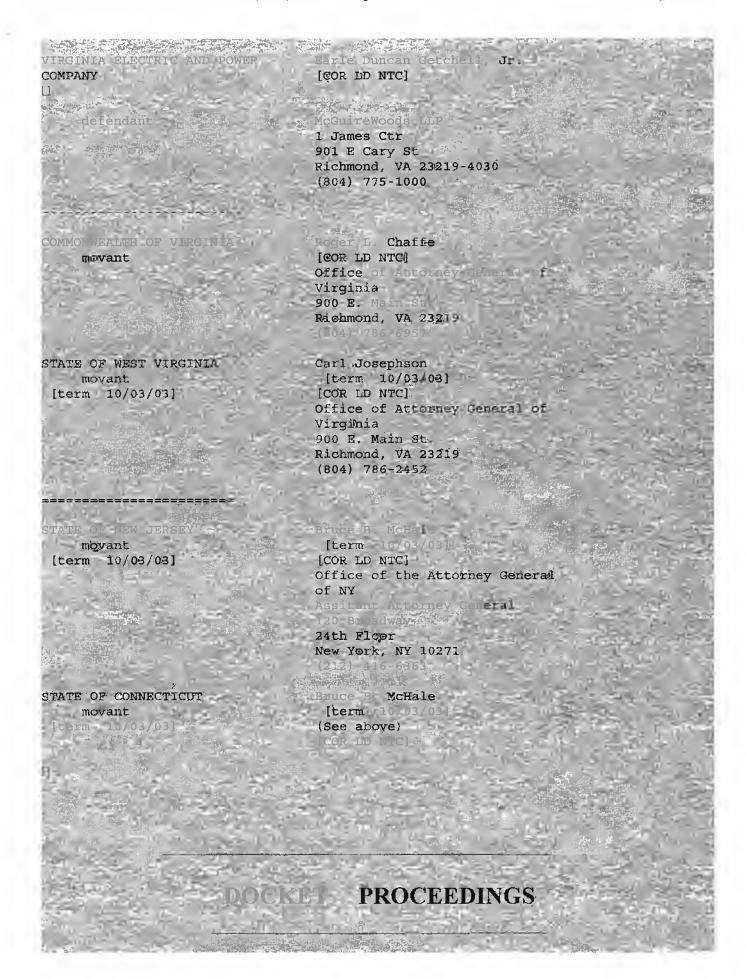
Basic Table Layout

## Appendix D

# To Dominion's Possum Point Power Station Title V Permit

Acid Rain (Title IV) Permit Application with NOx Compliance Plan and NOx Averaging Plan

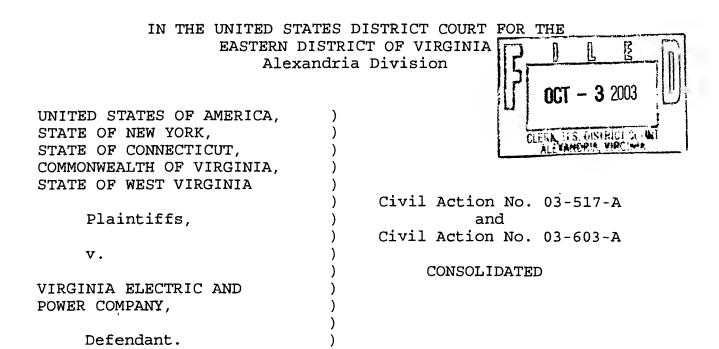
Docket as of October 10, 2003 7:05 pm Web PACER (v2.4 Eastern District of Virginia (Alexandria) **CIVIL DOCKET FOR CASE #: 03-CV-517** tates, et al v. Virginia Electri Filed: 04/21/03 Assigned to: Judge Leonie M. Brinkema Demand: \$0,000 Nature of Suit: 893' Lead Docket: None Jurisdiction: US Plaintiff Dkt# in other court: None Cause: 42:7604 Clear Air Act (Emission Standards) UNIT D Richard W ponseller plaintiff [COR LD NTC] United States Attorney's Offic 2100 Jamieson Ave Alexandria, VA 2231 (703) 299-3700 STATE OF NEW JERSEY Bruce B. McHale intervenor-plaintiff [COR LD NTC] Office of the Attorney General Assitant Attorney General 120 Broadway 24th Floor New York, NY 10271 (212) 416-6363 STATE OF CONNECTI Bruce B. McHale (See above) 標序 intervenor-plaintiff [COR LD NTC] STATE OF WEST VIRGINIA Carl Josephson intervenor-plaintiff [COR LD NTC] Office o A torney G n Virginia 900 E. Main St Richmond, VA 23219 (804) 786-2452



DATE #	DOCKET ENTRY
4/21/03 1	COMPLAINT (kcha) [Entry date 04/24/03]
4/21/03 2	NOTICE by United States of Lodging of Proposed Gonsent Decree (keha) [Entry date 04/24/03]
4/22/03 3	MOTION by Commonwealth of VA for Leave to Intervene and Complaint in Intervention (kcha) [Entry date 04/24/03]
4/22/03 4	MOTION by State of West VA for Leave to Intervene and Complaint in Intervention (kcha) [Entry date 04/24/03]
4/25/03 5	ORDER, for Roland Theodore Huson, III to appear pro hac vice Filing Fee Paid \$ 25.00 Receipt # 100163166 ( signed by Judge Leonie M. Brinkema ) Copies Mailed: yes [EOD Date: 4/29/03] (lkin) [Entry date 04/29/03]
7/22/03 6	ORDER, that this case hereby is consolidated with the case United States of America v. Electric and Power Company, CA-0'3-517-A (see order for details) ( signed by Judge Leonie M. Brinkema ) Copies Mailed: Yes [EOD Date: 7/23/03] (kjon) [Entry date 07/23/03]
7/22/03	Cònsolidated Lead Case (consólidated with CA-03-603-A) (kjon) [Entry date 07/23/03]
8/27/03	ORDER, rescheduling pretrial conference from 8/27/03 to 9/17/03 at 10:10 a.m. ( signed by Magistrate Judge Barry R. Poretz ) Copies Mailed: yes [EOD Date: 8/28/03] (mcke) [Entry date 08/28/03]
8/27/03 -	Deadline updated; set Initial Pretrial Conference for 10:10 9/17/03 (per order of Mag. Judge Poretz that was filed in CA-03-603-A, with a copy in this case) (mcke) {Entry date 08/28/03]
9/16/03 8 	ORDER, that the initial pretrial originally set for 9/17/03 at 10:00 am is reset Initial Pretrial Conference for 10:00 10/29/03 ( signed by Magistrate Judge Thomas R. Jones Jr. ) Copies Mailed: yes [EOD Date: 9/16/03] (mcke)
9/22/03 9	MOTION to Intervene by State of New Jersey, State of Connecticut (kjon) [Entry date 09/29/03]
9/22/03 10	MEMORANDUM OF LAW by State of Price Jersey, State of Connecticut in support of [9-1] motion to Intervene (HARGE PLEADING) (kjon) [Entry date 09/29/03]
9/22/03 11	NOTICE of Hearing: Motion Hearing Deadline set for 10:00 10/3/03 for [9-1] motion to Intervene by State of New Jersey, State of Connecticut (kjon) [Entry date 09/29/03]
9/22/03 12	NOTICE of Attorney Appearance for State of New Jersey State of Connecticut, by Bruce B. McHale (kjon) [Entry date 09/29/03]

[] 2 3 3 4	
9/22/03 13	Joint Stipulation filed by United States, State of New Jersey, State of Connecticut, Virginia Electric (kjon) (Entry date 09/29/03)
9/30/03 14	ORDER, for John R. Renella to appear pro hac vice Filing Fee Paid \$ 50.00 Receipt # 100 166649 ( signed by Judge Leonie M. Brinkema ) Copies Mailed: Yes [EOD Date: 9/30/03] (kjon)
9/30/03 15	ORDER, for Carmel Alicia Motherway to appear pro hac vice Filing Fee Paid \$ 50.00 Receipt # 100 166649 ( signed by: Judge Leonie M. Brinkema ) Copies Mailed: Yes [EOD Date: 9/30/03] (kjon)
9/30/03 16	MOTION by United States to enter the consent decree as the order of this court (kjon)
9/30/03 17	MEMORANDUM by United States in support of [16-1] motion by United States to enter the consent decree as the order of this court (LARGE PEEADING) (kgjon)
9/30/03 18	Declaration of Thomas A. Mariani, Jr. re: [16-1] motion by United States to enter the consent decree as the order of this count (kjon)
40/2/ <b>0</b> 3	Per LMB chambers motions set for 10/03/03 are on papers (stas)
10/3/08 19	ORDER GRANTING [9-1] motion to Intervene as Pltfs' by State of New Jersey, State of Connecticut; GRANTING [4-1] motion by State of West VA for Leave to Intervene as Pltf; GRANTING [46-1] motion United States to enter the consent decree as the order of this court; The Clerk is directed to enter the consent decree as the judgment of the Court pursuant to FRCP 58 (see Order for details) ( signed by Judge Leonie M. Brinkema ) Copies Mailed: yes [EOD Date: 10/7/03] (pmil) [Entry date 10/07/03]
10/3/03 20	JUDGMENT/CONSENT WECREE for United States as a civil penalty in the amount of \$5.3 million and against Virginia Electric to be paid within 30 calendar days of the entry of this Consent Decree; the Civil Penalty shall be paid by Electronic Funds Transfer ("EFT") to the U.S. Dept. of Justice, in accordance w/current EFT procedures, referencing the USAO File No. 2003V00487 and DOJ CA No 90-5-2-1-07122 and the civil action case name and case number of this action. The costs of EFT shall be VEPCO's responsibility. Payment shall be made in accordance w/instructions provided by the Financial Litigation Unit of the U.S. Attorney's Office for the EDVA. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. VERCO shall provide notice of payment, the referencing the USAO File Number, DOJ Gase Number 90-5-2-1-07122, and the civil action case name and number, to the Dept. of Justice and to EPA, as provided in Section XXIX, Paragraph 187 ("Notice"). Failure to timely pay the civil penalty shall subject VEPCO to interest accruing from XXIX, Paragraph 187 ("Notice"). Failure to timely pay the

the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. 1961, and shall render VEPCO liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the U.S. in securing payment; Entered pursuant to FRCP 58 (see Judgment/Consent Decree for details) ( signed by Judge Leonie M. Brinkema ) Copies Mailed: yes (LARGE PLEADING) [EOD DATE: 10/10/03] (pmil) [Entry date 10/10/03] 10/3/03 Case closed (pmil) [Entry date 10/10/03] 10/3/03 ALL PLEADINGS ACCOUNTED FOR AND IN ORDER (pmil) [Entry date 10/10/03] CLOSED . LEAD **PACER Service Center Transaction Receipt** 10/19/2003 19:14:30 PACER Login: Client Code: Description: docket report Search Criteria: 1:03cv00517 Billable Pages: Cost: 0.35



#### <u>ORDER</u>

Before the Court is the Motion of the United States to Enter the Consent Decree As the Order of This Court. Also before the Court are motions of the State of New Jersey, State of Connecticut, and State of West Virginia to intervene as additional plaintiffs. The motions to intervene are unopposed and will be granted.

The United States and the several states, along with Defendant Virginia Electric and Power Company ("VEPCO"), have submitted a consent decree to resolve all claims brought by plaintiffs against defendants under the Clean Air Act. The parties represent that this consent decree is a well-considered agreement to reduce the emissions of pollutants from Defendant's coal-fired, electric generating units located in Virginia and

West Virginia. The parties have submitted a memorandum outlining the background of the litigation, the claims alleged against VEPCO, and the key terms of the decree.

The United States filed Notice of Lodging of Proposed

Consent Decree on April 21, 2003, and invited comment by

publishing notice in the Federal Register on June 19, 2003. At

the completion of the comment period, the only comments received

were from the Attorney General of the Commonwealth of

Massachusetts. Those comments did not urge the Court to reject

the decree, and the Commonwealth of Massachusetts has not sought

to intervene in this civil action. In their memorandum asking

the Court to enter the proposed consent decree, the parties have

presented and sufficiently responded to the objections of the

Commonwealth of Massachusetts.

The Court has thoroughly reviewed the information presented by the parties, and is persuaded that the proposed consent decree is fair, adequate, and reasonable, and not illegal, the product of collusion, or against public policy. Therefore, the Court finds that the proposed consent decree is in the public interest, and will enter it as the judgment of this Court. Accordingly, it is hereby

ORDERED that the motions of the states of New Jersey,

Connecticut, and West Virginia to intervene as plaintiffs be and

are GRANTED, and it is further

ORDERED that the Motion of the United States to Enter the Consent Decree as the Order of This Court be and is GRANTED.

The Clerk is directed to enter the consent decree as the judgment of the Court pursuant to Fed. R. Civ. P. 58 and forward copies of this Order to counsel of record.

Entered this 3<sup>nd</sup> day of October, 2003.

Lebnie M. Brinkema

United States District Judge

Alexandria, Virginia

# UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA



)
UNITED STATES OF AMERICA, )
STATE OF NEW YORK, )
STATE OF NEW JERSEY, )
STATE OF CONNECTICUT,
COMMONWEALTH OF VIRGINIA
STATE OF WEST VIRGINIA )
)
Plaintiffs, )
)
v. )
)
VIRGINIA ELECTRIC AND )
POWER COMPANY, )
)
Defendant.
ý

CIVIL ACTION NO. 03-517 A
CONGOLIDATED W/13-603-A

#### **CONSENT DECREE**

WHEREAS Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), has filed a Complaint alleging that Defendant, Virginia Electric and Power Company ("VEPCO"), commenced construction of major modifications of major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") requirements at Part C of the Clean Air Act ("Act"), 42 U.S.C. §§ 7470-7492;

WHEREAS on April 24, 2000, EPA issued a Notice of Violation ("NOV") to VEPCO with respect to certain alleged violations of PSD;

WHEREAS Plaintiff, the State of New York, filed a complaint against VEPCO on July

20, 2000, alleging violations of the Act at VEPCO's Mount Storm Power Station located in northeastern West Virginia;

WHEREAS Plaintiff, the State of Connecticut, has issued VEPCO a notice of intent to sue, alleging violations of the Act and also has filed a complaint alleging violations of the Act at certain VEPCO electric generating units;

WHEREAS Plaintiff, the State of New Jersey, has issued to VEPCO a notice of intent to sue, alleging violations of the Act and also filed a complaint alleging violations of the Act at certain VEPCO electric generating units;

WHEREAS Plaintiff the Commonwealth of Virginia is filing a Motion for Leave to Intervene and Complaint in Intervention alleging that VEPCO may have violated Virginia's air pollution regulations found at 9 VAC 50-80-1700, et seq., "Permits for Major Stationary Sources and Major Modifications Locating in Prevention of Significant Deterioration Areas," at one or more of its coal-fired generating units located in Virginia and that such violations may recur or other similar violations may occur in the future;

WHEREAS the Parties consent to intervention by the Commonwealth of Virginia;

WHEREAS Plaintiff the Commonwealth of Virginia has a significant interest in this litigation by reason of its aforesaid Complaint as well as by reason of: (1) the fact that a significant portion of the relief provided by this Decree will involve facilities located within Virginia and regulated by the Commonwealth and no other State, and (2) the fact that such relief will directly impact the issuance to the affected facilities of permits under the Commonwealth's program approved pursuant to Title V of the Clean Air Act;

WHEREAS, Section 10.1-1186.4 of the Code of Virginia specifically authorizes the Attorney General of Virginia to seek to intervene in pending federal enforcement actions such as this one brought by the United States through the Environmental Protection Agency.

WHEREAS Plaintiff the State of West Virginia is filing a Motion for Leave to Intervene and Complaint in Intervention alleging that VEPCO may have violated West Virginia's air pollution regulations found at 45CAR14, "Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration," at one or more of its coal-fired generating units located in West Virginia and that such violations may recur or other similar violations may occur in the future;

WHEREAS the Parties consent to intervention by the State of West Virginia;

WHEREAS Plaintiff the State of West Virginia has a significant interest in this litigation by reason of its aforesaid Complaint as well as by reason of: (1) the fact that a significant portion of the relief provided by this Decree will involve facilities located within West Virginia and regulated by the State of West Virginia and no other State, and (2) the fact that such relief will directly impact the issuance to the affected facilities of permits under the West Virginia program approved pursuant to Title V of the Clean Air Act;

WHEREAS, Section 22-1-6 (d)(3) of the West Virginia Code specifically authorizes the Secretary of the West Virginia Department of Environmental Protection to enforce the statutes or rules which the Department is charged with enforcing.

WHEREAS VEPCO, a large electric utility, responded in a constructive way to Plaintiffs' notices of intent to sue and the NOV and expended significant time and effort to develop and agree to the terms of settlement embodied in this Decree;

WHEREAS VEPCO asserts that installation and operation of the pollution controls required by this Decree will result in emission reductions beyond current regulatory requirements;

WHEREAS the steam electric generating units at VEPCO's Mount Storm Power Station qualified for alternative emission limitations under 40 CFR Section 76.10 because VEPCO demonstrated under the applicable standard that they were not capable of meeting the emissions limitations otherwise applicable under the Clean Air Act's Acid Rain Nitrogen Oxides Emission Reduction Program;

WHEREAS Plaintiffs and VEPCO disagree fundamentally over the nature and scope of modifications that may be made to steam electric generating units without implicating the New Source Review requirements (including PSD) under the Act and its regulations;

WHEREAS nothing in this Decree resolves or is intended to resolve those disagreements;

WHEREAS VEPCO has advised the United States and the Plaintiff States that VEPCO has entered into this Consent Decree in reliance on the expectation that EPA will continue to enforce the modification provisions of the Act's New Source Review program in substantially the same manner as set forth in the complaints filed herein;

WHEREAS VEPCO has been advised that the United States retains all of its discretion concerning whether and how to enforce the Clean Air Act against any person, nothing in this Consent Decree is intended to predict or impose enforcement activities on EPA or the United States, and that the obligations of VEPCO under this Consent Decree are not conditional on subsequent enforcement activities of the Federal government;

WHEREAS the Plaintiffs allege that their Complaints state claims upon which the relief can be granted against VEPCO under Sections 113, 167, or 304 of the Act, 42 U.S.C. §§ 7413, 7477, or 7604;

WHEREAS VEPCO has not answered any of the Complaints in light of the settlement memorialized in this Decree;

WHEREAS VEPCO has denied and continues to deny the violations alleged in the NOV and the Complaints; maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief; and states that it is agreeing to the obligations imposed by this Decree solely to avoid the costs and uncertainties of litigation and to improve the environment:

WHEREAS VEPCO intends to comply with any applicable Federal or State

Implementation Plans that result from the NO<sub>x</sub> SIP Call (63 Fed. Reg. 57356 (1998)) separate
and apart from the obligations imposed by this Decree, and such Federal or State Implementation
Plans that may ultimately result from the NO<sub>x</sub> SIP Call are not intended to be enforceable under
this Decree, and instead are enforceable in accordance with their own terms and the laws
pertaining to them;

WHEREAS the Plaintiffs and VEPCO agree that settlement of these actions is fair, reasonable, and in the best interest of the Parties and the public, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS the Plaintiffs and VEPCO have consented to entry of this Decree without the trial or other litigation of any allegation in the complaints;

NOW THEREFORE, without any admission of fact or law, and without any admission of

the violations alleged in the Complaints or NOV, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. Solely for purposes of entry and enforcement of this Decree, the parties agree that this Court has jurisdiction over the subject matter herein and over the Parties consenting hereto pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and also pursuant to 42 U.S.C. §7604(a). Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). VEPCO consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the Plaintiffs and VEPCO. VEPCO consents to entry of this Decree without further notice.

#### II. APPLICABILITY

- 2. Scope. The provisions of this Consent Decree shall apply to and be binding upon—consistent with Section XXVIII ("Sale or Transfers of Ownership Interests") the Plaintiffs and VEPCO, including VEPCO's officers, employees, and agents solely in their capacities as such. Unless otherwise specified, each requirement on VEPCO under this Consent Decree shall become effective thirty days after entry of this Decree.
- 3. Notice to those Performing Decree-Mandated Work. VEPCO shall provide a copy of this

Decree to all vendors, suppliers, consultants, or contractors performing any of the work described in Sections IV through IX. Notwithstanding any retention of contractors, subcontractors or agents to perform any work required under this Consent Decree, VEPCO shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, VEPCO shall not assert as a defense the failure of its employees, servants, agents, or contractors to take actions necessary to comply with this Decree, unless VEPCO establishes that such failure is delayed or excused under Section XXVI ("Force Majeure").

#### III. DEFINITIONS

- 4. Every term expressly defined by this Section shall have the meaning given that term herein. Every other term used in this Decree that is also a term used under the Act or the regulations implementing the Act shall mean in this Decree what such terms mean under the Act or those regulations.
- 5. "30-Day Rolling Average Emission Rate" for a Unit means and is calculated by (A) summing the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; (B) summing the total heat input to the Unit in mmBTU during the Operating Day and during the previous twenty-nine (29) Operating Days; and (C) dividing the total number of pounds of pollutants emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days, and converting the resulting value to lbs/mmBTU. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. In calculating all 30-Day Rolling Average Emission

#### Rates VEPCO:

A. shall include all emissions and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through the time that the Unit ceases to combust fossil fuel and the fire is out in the boiler, except as provided by Subparagraph B, C, or D;

- B. shall use the methodologies and procedures set forth in 40 C.F.R. Part 75;
- C. may exclude emissions of NOx and BTUs occurring during the fifth and subsequent Cold Start Up Period(s) that occur in any 30-Day period if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emissions Rate, and if VEPCO has installed, operated and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any fossil fuel) for a period of six hours or more. The emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the less of (1) those NOx emissions emitted during the eight hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight hours later or (2) those emitted prior to the time that the flue gas has achieved the SCR operational temperature as specified by the catalyst manufacturer; and
- D. may exclude NOx emissions and BTUs occurring during any period of malfunction (as defined at 40 C.F.R. 60.2) of the SCR.
- 6. "30-Day Rolling Average Removal Efficiency" means the percent reduction in the SO<sub>2</sub>
  Emissions Rate achieved by a Unit's FGD over a 30 Operating Day period, as further described by the terms of this Decree.
- 7. "Air Quality Control Region" means a geographic area designated under Section 107(c)

of the Act, 42 U.S.C. § 7407(c).

- 8. "Boiler Island" means a Unit's (A) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (B) combustion air system; (C) steam generating system (firebox, boiler tubes, and walls); and (D) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic U.S. EPA (November 25, 1986) and attachments thereto.
- 9. "Capital Expenditures" means all capital expenditures, as defined by Generally Accepted Accounting Principles (GAAP), as VEPCO applied GAAP to its Boiler Island expenditures for the calendar years 1995-2000. Excluded from "Capital Expenditure" is the cost of installing or upgrading pollution control devices and the cost of altering or replacing any portion of the Boiler Island if such alteration or replacement is required in accordance with good engineering practices to accomplish the installation or upgrading of a pollution control device to meet the requirements of this Decree.
- 10. "CEMS" or "Continuous Emission Monitoring System," for obligations involving NO<sub>x</sub> and SO<sub>2</sub> under this Decree, shall mean "CEMS" as defined in 40 C.F.R. Section 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 11. "Clean Air Act" or "Act" means the Clean Air Act, 42 U.S.C. §§7401-7671q, and its implementing regulations.
- 12. "Completed," when used in connection with Sections XI through XVII (Resolution of Certain Civil Claims) and with respect to a change or modification, means the time when the Unit subject to the change or modification has been returned to service and is capable of generating electricity.

- 13. "Connecticut" means the State of Connecticut.
- 14. "Consent Decree" or "Decree" means this Consent Decree and its Appendices A through C, which are incorporated by reference (Appendix A -- "Coal-Fired Steam-Electric Generating Units Constituting the VEPCO System"; Appendix B -- "Consent Decree Reporting Form"; and Appendix C -- "Mitigation Projects that Shall be Completed Under this VEPCO Consent Decree").
- 15. "Defendant" means Virginia Electric and Power Company or VEPCO.
- 16. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb mmBTU"), measured as required by this Consent Decree.
- 17. "EPA" means the United States Environmental Protection Agency.
- 18. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.
- 19. "FGD" means a pollution control device that employs flue gas desulfurization technology to remove SO<sub>2</sub> from flue gas.
- 20. "Improved Unit" means, in the case of NOx, a VEPCO System Unit scheduled under this Decree to be equipped with SCR and, in the case of SO2, means a VEPCO System Unit scheduled under this Decree to be equipped with an FGD, or Possum Point Units 3 and 4 because of their conversion to natural gas, as listed in Appendix A of this Decree and any amendment thereto. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for the other.
- 21. "KW" means a kilowatt, which is one thousand Watts or one thousandth of a megawatt (MW).

- 22. "lb/mmBTU" means the number of pounds of pollutant emitted per million British
  Thermal Units of heat input.
- 23. "MW" means megawatt or one million Watts.
- 24. "National Ambient Air Quality Standards" means national air quality standards promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- 25. "New York" means the State of New York.
- 26. "New Jersey" means the State of New Jersey.
- 27. "NOV" means the Notice of Violation issued by EPA to VEPCO, dated April 24, 2000.
- 28. "NO<sub>x</sub>" means oxides of nitrogen, as further described by the terms of this Decree.
- 29. "NSR" means New Source Review and refers generally to the Prevention of Significant

  Deterioration and Non-Attainment provisions of Parts C and D of Subchapter I of the Act.
- 30. "Operating Day" for a coal-fired Unit means any calendar day on which such a Unit burns fossil fuel.
- 31. "Other Unit" means any Unit of the VEPCO System that is not an Improved Unit for the pollutant in question. A Unit may be an Improved Unit for NOx and an Other Unit for SO2 and vice versa.
- 32. "Ozone Season" means the five-month period from May 1 through September 30 of any year after 2004. For the year 2004, "Ozone Season" means the period from May 31, 2004, through September 30, 2004.
- 33. "Paragraph" means a provision of this Decree preceded by an Arabic number.
- 34. "Parties" means VEPCO, the United States, Virginia, West Virginia, New York, New Jersey, and Connecticut.

- 35. "Plaintiffs" means the United States, New York, New Jersey, Connecticut, Virginia, and West Virginia.
- 36. "PM" means total particulate matter as further described by the terms of this Decree.
- 37. "PM CEM" or "PM Continuous Emission Monitor" means equipment that samples, analyses, measures, and provides PM emissions data -- by readings taken at frequent intervals -- and makes an electronic or paper record of the PM emissions measured.
- 38. "Pollution Control Upgrade Analysis" means the technical study, analysis, review, and selection of control technology recommendations (including an emission rate or removal efficiency) performed in connection with an application for a federal PSD permit, taking into account the characteristics of the existing facility. Except as otherwise provided in this Consent Decree, such study, analysis, review, and selection of recommendations shall be carried out in accordance with applicable federal and state regulations and guidance describing the process and analysis for determining Best Available Control Technology (BACT), as that term is defined in 40 C.F.R. §52.21(b)(12), including, without limitation, the December 1, 1987 EPA

  Memorandum from J. Craig Potter, Assistant Administrator for Air and Radiation, regarding Improving New Source Review (NSR) Implementation. Nothing in this Decree shall be construed either to: (A) alter the force and effect of statements known as or characterized as "guidance" or (B) permit the process or result of a "Pollution Control Upgrade Analysis" to be considered BACT for any purpose under the Act.
- 39. "ppm" means parts per million by dry volume, corrected to 15 percent O<sub>2</sub>.
- 40. "Project Dollars" means VEPCO's properly documented internal and external costs incurred in carrying out the dollar-limited projects identified in Section XXI ("Mitigation

Projects") and Appendix C, as determined in accordance with Generally Accepted Accounting Principles (GAAP) (subject to review by the Plaintiffs), and provided that such costs comply with the Project Dollars and other requirements for such expenditures and payments set forth in Section XXI ("Mitigation Projects") and Appendix C.

- 41. "PSD" means Prevention of Significant Deterioration, as that term is understood under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 7492 and 40 C.F.R. Part 52.
- 42. "PSD Increment" means the maximum allowable increase in a pollutant's concentration over the baseline concentration within the meaning of Section 163 of the Act, 42 U.S.C. § 7473 and 40 C.F.R. § 51.166(c).
- 43. "SCR" means a pollution control device that employs selective catalytic reduction to remove NO<sub>x</sub> from flue gas.
- 44. "Seasonal System-Wide Emission Rate" for a pollutant means the total pounds of the pollutant emitted by the VEPCO System during the period from May 1 through September 30 of each calendar year, divided by the total heat input (in mmBTU) to the VEPCO System during the period from May 1 through September 30 of the same calendar year. VEPCO shall calculate the Seasonal System-Wide Emission Rates from hourly CEMS data collected and analyzed in compliance with the 40 C.F.R. Part 75.
- 45. "Section" means paragraphs of this Decree collected under a capitalized heading that is preceded by a Roman Numeral.
- 46. "SO<sub>2</sub>" means sulfur dioxide, as described further by the terms of this Decree.
- 47. "SO<sub>2</sub> Allowance" means the same as the definition of "allowance" found at 42 U.S.C.

  Section 7651a(3): "an authorization, allocated to an affected unit, by the Administrator [of EPA]

under [Subchapter IV of the Act] to emit, during or after a specified calendar year, one ton of sulfur dioxide."

- 48. "Subparagraph" means any subdivision of a Paragraph identified by any number or letter.
- 49. "System-Wide Annual Emission Rate" for a pollutant shall mean the total pounds of the pollutant emitted by the VEPCO System during a calendar year, divided by the total heat input (in mmBTU) to the VEPCO System during the same calendar year. VEPCO shall calculate and analyze the System-Wide Annual Emission Rates from hourly CEM data collected in compliance with 40 C.F.R. Part 75.
- 50. "Title V Permit" means each permit required under Subchapter V of the Clean Air Act, 42 U.S.C. § 7661, et seq., for each electric generating plant that includes one or more Units that are part of the VEPCO System.
- 51. "VEPCO System" means all the Units listed here and described further in Appendix A: Bremo Power Station Units 3 and 4 (in Fluvanna County, Virginia); Chesapeake Energy Center Units 1, 2, 3, and 4 (near Chesapeake, Virginia); Chesterfield Power Station Units 3, 4, 5, and 6 (in Chesterfield County, Virginia); Clover Power Station Units 1 and 2 (in Halifax County, Virginia); Mount Storm Power Station Units 1, 2, and 3 (in northeastern West Virginia); North Branch Power Station Units 1A and 1B (in northeastern West Virginia); Possum Point Power Station Units 3 and 4 (in Northern Virginia, about twenty-five miles south of Washington, D.C.); and Yorktown Power Station Units 1 and 2 (in Yorktown, Virginia).
- 52. "Virginia" means the Commonwealth of Virginia.
- 53. "Watt" means a unit of power equal to one joule per second.
- 54. "West Virginia" means the State of West Virginia.

55. "Unit" means a generator, the steam turbine that drives the generator, the boiler that produces the steam for the steam turbine, the equipment necessary to operate the generator, turbine and boiler, and all ancillary equipment, including pollution control equipment or systems necessary for the production of electricity.

# IV. NO. EMISSION REDUCTIONS AND CONTROLS

56. <u>Unit-Specific SCR Installations and Performance Requirements</u>. VEPCO shall install an SCR on each Unit listed below, no later than the date specified below and, commencing on that date and continuing thereafter, operate each SCR to meet a 30-Day Rolling Average Emission Rate for NO<sub>x</sub> of 0.100 lb/mmBTU for each listed Unit, except that VEPCO shall meet a 30-Day Rolling Average Emissions Rate of 0.110 lb/mmBTU for Mount Storm Units 1, 2 and 3:

Units on Which VEPCO Shall Install an SCR	Latest Date by which VEPCO Must: (A) Complete Installation of Fully Operational SCR, and (B) Start Operation that Meets 30-Day Rolling Average NO <sub>x</sub> Emission Rate
Mount Storm Unit 1	January 1, 2008
Mount Storm Unit 2	January 1, 2008
Mount Storm Unit 3	January 1, 2008
Chesterfield Unit 4	January 1, 2013
Chesterfield Unit 5	January 1, 2012
Chesterfield Unit 6	January 1, 2011
Chesapeake Energy Center Unit 3	January 1, 2013
Chesapeake Energy Center Unit 4	January 1, 2013

- 57. VEPCO also shall use best efforts to operate each SCR required under this Decree whenever VEPCO operates the Unit served by the SCR, in accordance with manufacturers' specifications, good engineering practices, and VEPCO's operational and maintenance needs.
- Year-Round Operation of SCRs. Beginning on January 1, 2008, and continuing thereafter, in accordance with the SCR installation schedule provided for in Paragraph 56 (Unit specific SCR Installation and Performance Requirements), every VEPCO System Unit served by an SCR required pursuant to Paragraph 56 shall operate year-round and achieve and maintain a NO<sub>x</sub> 30-Day Rolling Average Emission Rate of no more than 0.100 lb/mmBTU, except that

Mount Storm Units 1, 2 and 3 shall achieve a NOx 30-Day Rolling Average Emission Rate of no more than 0.110 lb/mmBTU.

- 59. VEPCO System: Interim Control of NO<sub>x</sub> Emissions: 2004 through 2007. Commencing in 2004 and ending on December 31, 2007, VEPCO shall control NO<sub>x</sub> emissions under the provisions of either Subparagraph (A) or (B) of this Paragraph. VEPCO may elect to comply with either Subparagraph in any calendar year and may change its election from year to year. VEPCO shall notify the Parties in writing on or before January 1 of each calendar year of whether it elects to comply with Subparagraph (A) or Subparagraph (B) for that year. If VEPCO fails to provide such notice by January 1 of any year, the last elected option for the prior calendar year shall be deemed to apply, and, if none, Subparagraph (B) shall be deemed to apply for such year. The requirements of this Paragraph shall terminate on December 31, 2007:
  - (A) During the following three time periods, VEPCO shall control emissions of NO<sub>x</sub> by operating SCRs on VEPCO System Units of at least the mega-wattage capacities specified and shall achieve a 30-Day Rolling Average Emission Rate for NOx of no greater than 0.100 lb/mmBTU at each such Unit, except that Mount Storm Units 1, 2 and 3 shall achieve a NOx 30-Day Rolling Average Emission Rate of no more than 0.110 lb/mmBTU, as follows:
    - (i) May 31, 2004, through April 30, 2005: Operate SCR on combined capacity of at least 375 MW on any combination of VEPCO System Units, but at least one Unit so controlled shall be at the Chesterfield Station.
    - (ii) May 1, 2005, through April 30, 2006: Operate SCR on combined capacity of at least 875 MW on any combination of VEPCO System Units, but at

- least one-half of the 875 MW so controlled shall be from a Unit or Units at the Chesterfield and/or Mt. Storm Stations.
- (iii) May 1, 2006, through December 31, 2007: Operate SCR on combined capacity of at least 1,450 MW on any combination of VEPCO System
   Units, but at least one-half of the 1,450 MW so controlled shall be from a
   Unit or Units at the Chesterfield and/or Mt. Storm Stations; or
- (B) During the Ozone Seasons of the years 2004 through 2007, actual NO<sub>x</sub> emissions from the VEPCO System shall not exceed a Seasonal System Wide Emission Rate greater than 0.150 lb/mmBTU. VEPCO's compliance with this limit shall be achieved, in part, by operating an SCR at the Mt. Storm and Chesterfield Stations.
- 60. VEPCO System NO. Limits 2003 and thereafter: Declining, System-Wide Tonnage

  Caps. Actual, total emissions of NO<sub>x</sub> from the VEPCO System in each calendar year, beginning in 2003 and continuing thereafter, shall not exceed the number of tons specified below:

Calendar Year	Total Permissible NO <sub>x</sub> Emissions (in Tons) from VEPCO System
2003	104,000
2004	95,000
2005	90,000
2006	83,000
2007	81,000
2008	63,000
2009	63,000
2010	63,000
2011	54,000
2012	50,000
2013 and each year thereafter	30,250

- 61. <u>VEPCO System-Wide, Annual Average NO<sub>x</sub> Emission Rate</u>. Commencing January 1, 2013, and continuing thereafter, actual NO<sub>x</sub> emissions from the VEPCO System shall not exceed a System-Wide Annual Average Emission Rate of 0.150 lb/mmBTU.
- 62. NOx Measurement and Calculation Procedures and Methods. In determining emission rates for NO<sub>x</sub>, VEPCO shall use those applicable monitoring or reference methods specified in 40 C.F.R. Part 75.
- 63. Evaluation of NOx Emission Limitations Based Upon Performance Testing. At any time after September 30, 2004, VEPCO may submit to the Plaintiffs a proposed revision to the applicable 30-Day Rolling Average Emissions Rate for NOx on any VEPCO System Unit

equipped with SCR and subject to a 30-Day Rolling Average Emission Rate. To make a successful petition, VEPCO must demonstrate that it cannot consistently achieve the Decree-mandated NOx emissions rate for the Unit in question, considering all relevant information, including but not limited to the past performance of the SCR, reasonable measures to achieve the designed level of performance of the SCR in question, the performance of other NOx controls installed at the unit, and the operational history of the Unit. VEPCO shall include in such proposal an alternative 30-Day Rolling Average Emissions Rate. VEPCO also shall retain a qualified contractor to assist in the performance and completion of the petition for an alternate 30-Day Rolling Average Emissions Rate for NOx. VEPCO shall deliver with each submission all pertinent documents and data that support or were considered in preparing such submission. If the Plaintiffs disapprove the revised emission rate, such disagreement is subject to Section XXVII ("Dispute Resolution"). VEPCO shall make any submission for any Unit under this Paragraph no later than fifteen months after the compliance date specified for that unit in Paragraph 56 ("Unit-Specific SCR Installations and Performance Requirements").

# V. SO, EMISSION REDUCTIONS AND CONTROLS

64. Installation and Construction of, and Improvements to, plus Removal Efficiencies

Required on, FGDs Serving: Clover Units 1 and 2, Mount Storm Units 1, 2, and 3, and

Chesterfield Units 5 and 6. VEPCO shall construct or improve -- as applicable -- FGDs for each

Unit listed below, to meet or exceed the Removal Efficiencies for SO<sub>2</sub> specified below, in

accordance with the schedules set out below. VEPCO shall operate each FGD so that each Unit

shall continuously meet or exceed the SO<sub>2</sub> removal efficiency specified for it, as a 30-Day

Rolling Average Removal Efficiency, during the time periods described (Phases I and II):

Plant Name and Unit Number	Duration of Phase I Removal Efficiency Requirement	Phase I Minimum 30-Day Rolling Average Removal Efficiency (%)	Duration of Phase II Removal Efficiency Requirement	Phase II Minimum 30-Day Rolling Average Removal Efficiency (%)
Clover Unit 1	Meet 30-Day Rolling Average by 09/01/ 2003 and thereafter	95.0	Same as Phase I	Same as Phase I
Clover Unit 2	Meet 30-Day Rolling Average by 09/01/2003 and thereafter	95.0	Same as Phase I	Same as Phase I
Mt. Storm Unit 1	Meet 30-Day Rolling Average by 09/01/2003 and through 12/31/04	93.0	Jan. 1, 2005, and thereafter	95.0
Mt. Storm Unit 2	Meet 30-Day Rolling Average by 09/01/2003 and through 12/31/04	93.0	Jan. 1, 2005, and thereafter	95.0
Mt. Storm Unit 3	Meet 30-Day Rolling Average by 09/01/2003 and through 12/31/04	93.0	Jan. 1, 2005, and thereafter	95.0

Chesterfield Unit 5	Oct. 12, 2012, and thereafter	95.0	Same as Phase I	Same a Phase I
Chesterfield Unit 6	Jan. 1, 2010, and thereafter	95.0	Same as Phase I	Same as Phase I

- 65. Chesterfield FGD Construction. This Decree does not require VEPCO to begin: (A) physical construction on or begin significant equipment procurement for the FGD for Chesterfield Unit 6 prior to July 1, 2008, or (B) physical construction on or significant equipment procurement for the FGD for Chesterfield Unit 5 before January 1, 2010.
- Option of Compliance with an Emission Rate after an FGD Demonstrates SO<sub>2</sub> 30-Day Rolling Average Removal Efficiency of at least 95.0%. Once a Unit (and its FGD) listed in Paragraph 64 demonstrates at least 95 percent removal efficiency for SO<sub>2</sub> for at least 180 consecutive days of operation without FGD bypass as specified in Paragraph 67 (omitting days on which the Unit did not combust fossil fuel) on a 30-Day Rolling Average basis, then VEPCO -- at its option and with written, prior notice to the Plaintiffs -- shall meet the following emission rate for SO<sub>2</sub> rather than the 30-Day Rolling Average Removal Efficiency specified in Paragraph 64:

Plant and Unit Eligible to Make 180-Day Demonstration	Maximum SO <sub>2</sub> 30-Day Rolling Average Emission Rate VEPCO shall meet in Lieu of 95.0%, 30-Day Rolling Average Removal Efficiency
Clover Unit 1	0.130
Clover Unit 2	0.130
Chesterfield Unit 5	0.130
Chesterfield Unit 6	0.130

Mount Storm Unit 1	0.150
Mount Storm Unit 2	0.150
Mount Storm Unit 3	0.150

# Notwithstanding the requirement to meet a specific percent removal or emission rate at Mount Storm Units 1, 2, or 3, in limited circumstances, VEPCO may operate such Units without meeting required Removal Efficiencies or Emission Rates in the case of FGD scrubber outages or downtime of the FGD scrubber serving each such Unit, if such operation complies with the following requirements. For this Paragraph, FGD outage or downtime "day" shall consist of a 24-hour block period commencing in the hour the FGD ceases to operate, and continuing in successive 24-hour periods until the hour the FGD is placed back into operation. Any period of less than 24 hours of FGD downtime shall count as a full "day". For the FGD serving Unit 3, because it has two separately operating absorber vessels, outage or downtime may be measured in "1/2 day" (12-hour) increments – one for each absorber – but otherwise on the same basis as a

"day" is counted for outage or downtime on the FGDs serving Units 1 and 2.

- (A) In any calendar year from 2003 through 2004 for Mount Storm Unit 3, and in any calendar year from 2003 through 2004 for Mount Storm Units 1 and 2, VEPCO may operate Mount Storm Units 1, 2, or 3 in the case of outage or downtime of the FGD serving such Unit, if all of the following conditions are satisfied:
  - (i) VEPCO does not operate Mount Storm Units 1, 2, or 3 during FGD outages or downtime on more than thirty (30) "days", or any part thereof, in any calendar year; in the case of Mount Storm Unit 3, operation during an outage or

downtime in either of the two FGD absorber vessels serving the Unit shall count as operation during a "1/2" day of FGD outage or downtime;

- (ii) All other available VEPCO System Units on-line at the Mount Storm
  Station and Clover Power Station are dispatched ahead of the Mount Storm Unit
  experiencing the FGD outage or downtime;
- (iii) For each of the first twenty (20) "days" in a calendar year, or part thereof, that a Unit operates under this Paragraph VEPCO surrenders to EPA (using the procedure Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for each ton of SO<sub>2</sub> actually emitted in excess of the SO<sub>2</sub> emissions that would have occurred if coal containing 1.90 lb/mmBTU sulfur had been burned; and
- (iv) For each "day", or part thereof, that a Unit operates under this Paragraph beyond twenty (20) "days" in a calendar year, VEPCO shall surrender to EPA (using the procedure in Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for each ton of SO<sub>2</sub> actually emitted in excess of SO<sub>2</sub> emissions that would have occurred if coal containing 1.70 lb/mmBTU sulfur had been burned.
- (B) In any calendar year from 2005 through 2007, VEPCO may operate Mount Storm Units 1, 2, or 3 in the case of FGD outage or downtime, if all of the following conditions are satisfied:

- (i) VEPCO does not operate Mount Storm Units 1 or 2 during FGD outages or downtime on more than thirty (30) "days", or any part thereof, in any calendar year; and in the case of Mount Storm Unit 3, operation during an outage or downtime in either one of the two FGD absorber vessels serving the Unit shall count as operation during "1/2" day of FGD outage or downtime;
- (ii) All other available VEPCO System Units on-line at the Mount Storm
  Station and Clover Power Station are dispatched ahead of the Mount Storm Unit
  experiencing the FGD outage or downtime;
- (iii) For each of the first ten (10) "days", or part thereof, in a calendar year that a Unit operates under this Paragraph VEPCO surrenders to EPA (using the procedure in Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for each ton of SO<sub>2</sub> actually emitted in excess of the SO<sub>2</sub> emissions that would have occurred if coal containing 1.90 lb/mmBTU sulfur had been burned;
- (iv) For each day that a Unit operates under this Paragraph from the eleventh through the twentieth "days", or part thereof, in a calendar year, VEPCO shall surrender to EPA (using the procedure in Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for each of the tons of SO<sub>2</sub> actually emitted that equal the mass emissions difference between actual emissions and those that would have occurred if coal containing 1.70

lb/mmBTU sulfur had been used.; and

- (v) For each day that a Unit operates under this Paragraph beyond twenty (20) "days", or part thereof, in a calendar year, VEPCO shall surrender to EPA (using the procedure Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for each ton of SO<sub>2</sub> actually emitted in excess of SO<sub>2</sub> emissions that would have occurred if coal containing 1.50 lb/mmBTU sulfur had been burned;
- (C) <u>In any calendar year from 2008 through 2012</u>, VEPCO may operate Mount Storm Units 1, 2, or 3 in the case of FGD outages or downtime, if all of the following conditions are satisfied:
  - (i) VEPCO does not operate Mount Storm Units 1, 2, or 3 during FGD outages or downtime on more than ten (10) "days", or part thereof, in any calendar year; in the case of Mount Storm Unit 3, operation during an outage or downtime in either of the two FGD absorber vessels serving the Unit shall count as "1/2" day of operation during an FGD outage or downtime;
  - (ii) All other available VEPCO System Units on-line at the Mount Storm
    Station and Clover Station are dispatched ahead of the Mount Storm Unit
    experiencing the FGD outage or downtime; and
  - (iii) VEPCO surrenders to EPA (using the procedure of Section VI, Paragraph 72) one SO<sub>2</sub> Allowance, in addition to any surrender or possession of allowances required under Title IV or under any other provision of this Consent Decree, for

each ton of SO<sub>2</sub> actually emitted in excess of SO<sub>2</sub> emissions that would have occurred if coal with 1.50 lb/mmBTU sulfur had been burned.

- 68. Calculating 30-Day Rolling Average Removal Efficiency of a VEPCO System FGD.

  The SO<sub>2</sub> 30-Day Rolling Average Removal Efficiency for a VEPCO System FGD shall be obtained and calculated using SO<sub>2</sub> CEMS data in compliance with 40 CFR Part 75 (from both the inlet and outlet of the control device) by subtracting the outlet 30-Day Rolling Average Emission Rate from the inlet 30-Day Rolling Average Emission Rate on each day the boiler operates, dividing that difference by the inlet 30-Day Rolling Average Emission Rate, and then multiplying by 100. A new 30-Day Rolling Average Removal Efficiency shall be calculated for each new Operating Day. In the case of FGDs serving Chesterfield Units 5 and 6 or Mount Storm Units 1, 2, or 3, if any flue gas emissions containing SO<sub>2</sub> did not pass through the inlet of the Unit's scrubber on a day when the Unit operated, VEPCO must account for, report on, and include any such emissions in calculating the FGD Removal Efficiency for that day and for every 30-Day Rolling Average of which that day is a part.
- 69. Commencing within 30 days after lodging of this Decree, VEPCO shall use best efforts to operate each such FGD at all times the Unit the FGD serves is in operation, provided that such FGD system can be operated consistent with manufacturers' specifications, good engineering practices and VEPCO's operational and maintenance needs. In calculating a 30-Day Rolling Average Removal Efficiency or a 30-Day Rolling Average Emission Rate for a Mount Storm Unit, VEPCO need not include SO<sub>2</sub> emitted by Unit while its FGD is shut down in compliance with Paragraph 67 ("Interim Mitigation of Mount Storm SO<sub>2</sub> Emissions While FGDs are Improved").

70. SO<sub>2</sub> Measurement Methods. VEPCO shall conduct all emissions monitoring for SO<sub>2</sub> in compliance with 40 C.F.R. Part 75.

# VI. ANNUAL SURRENDER OF SO2 ALLOWANCES

- 71. <u>Annual Surrender</u>. On or before March 31 of every year beginning in 2013 and continuing thereafter, VEPCO shall surrender 45,000 SO<sub>2</sub> Allowances. In each year, this surrender of SO<sub>2</sub> Allowances may be made either directly to EPA or by first transferring the SO<sub>2</sub> Allowances to another person in the manner provided for by this Decree.
- Surrender Directly to EPA. If VEPCO elects to make an annual surrender directly to EPA, VEPCO shall, on or before March 31, 2013, and on or before March 31 of each year thereafter, submit SO<sub>2</sub> Allowance transfer request forms to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of 45,000 SO<sub>2</sub> Allowances held or controlled by VEPCO to the EPA Enforcement Surrender Account or to any other EPA Account to which the EPA may direct. As part of submitting these transfer requests, VEPCO shall irrevocably authorize the transfer of these Allowances and VEPCO shall also identify by name of account and any applicable serial or other identification numbers or plant names the source and location of the Allowances being surrendered, as well as any information required by the transfer request form.
- Allowances to a person other than EPA, VEPCO shall include a description of such transfer in the next report submitted to Plaintiffs pursuant to Section XIX ("Periodic Reporting") of this Consent Decree. Such report shall: (A) provide the identity of the third-party recipient(s) of the

SO<sub>2</sub> Allowances and a listing of the serial numbers of the transferred allowances; (B) include a certificate in compliance with Section XIX from the third-party recipient(s) stating that it (they) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. No later than the next periodic report due 12 months after the first report of the transfer, VEPCO shall include in the Section XIX reports to Plaintiffs a statement that the third-party recipient(s) permanently surrendered the allowances to EPA within one year after VEPCO transferred the allowances to the third-party recipient(s). VEPCO shall not have finally complied with the allowance surrender requirements of this Paragraph until all third-party recipient(s) shall have actually surrendered the transferred allowances to EPA.

- 74. <u>Changes to Decree-Mandated SO<sub>2</sub> Allowance Surrenders</u> Beginning in 2013, and every year thereafter:
  - (A) If changes in Title IV of the Act or it implementing regulations decrease the number of SO<sub>2</sub> Allowances that are allocated to the VEPCO System Units for the year 2013 or any year thereafter, or if other applicable law either: (A) awards fewer than 127,363 SO<sub>2</sub> Allowances to the VEPCO System or (B) directs non-reusable surrender of SO<sub>2</sub> Allowances by VEPCO, then the number of SO<sub>2</sub> Allowances that VEPCO must surrender in such a year under this Section shall decrease by the same amount;
  - (B) If changes to Title IV of the Act or its implementing regulations result in (i) a reduction of SO<sub>2</sub> Allowances to the VEPCO System and (ii) any amount of SO<sub>2</sub> Allowances being auctioned-off, and the national SO<sub>2</sub> Allowance pool reflects a nationwide reduction in SO<sub>2</sub> Allowances of less than 35.6% from the 2010 national pool,

then the number of SO<sub>2</sub> Allowances that VEPCO must surrender in such year under this Section of this Decree shall decrease as follows:

45,000 – (127,363 x the percent reduction of the National pool)

Thus, if the national pool of SO<sub>2</sub> Allowances is reduced by greater than 35.6% from the 2010 national pool of SO<sub>2</sub> allowances, then VEPCO is not required to surrender any SO<sub>2</sub> Allowances under this Decree. But in no event shall VEPCO keep in excess of 82,363 SO<sub>2</sub> Allowances allocated in any year after 2012 to the VEPCO System.

- (C) If changes to Title IV of the Act or its implementing regulations result in an increase of SO<sub>2</sub> Allowances to VEPCO, then VEPCO's annual obligation to surrender such Allowances under this Decree shall increase by the amount of such increase.
- Decree. For all SO<sub>2</sub> Allowances Related to VEPCO System Units Scheduled for FGDs under the Decree. For all SO<sub>2</sub> Allowances allocated to Mount Storm Unit 1 on or after January 1, 2003, Mount Storm Unit 2 on or after January 1, 2003, Chesterfield Unit 5 on or after October 1, 2012, and Chesterfield Unit 6 on or after January 1, 2010, VEPCO may use such SO<sub>2</sub> Allowances only to (A) meet the SO<sub>2</sub> Allowance surrender requirements established for the VEPCO System under this Decree; (B) meet the limits imposed on VEPCO under Title IV of the Act; or (C) meet any federal or state future emission reduction programs that use or rely on Title IV SO<sub>2</sub> Allowances for compliance, in whole or in part. However, if VEPCO operates a FGD serving Mount Storm Unit 1, Mount Storm Unit 2, Chesterfield Unit 5, or Chesterfield Unit 6 either: (A) earlier than required by a provision of this Decree or (B) at a 30-Day Rolling Average Removal Efficiency greater than, or a 30-Day Rolling Average Emissions Rate less than that required by this Decree, then VEPCO may use for any lawful purpose SO<sub>2</sub> Allowances equal to the number of tons of

SO<sub>2</sub> that VEPCO removed from the emission of those Units in excess of the SO<sub>2</sub> tonnage reductions required by this Decree, so long as VEPCO timely reports such use under Section XIX.

- 76. Other Limits on Use of SO<sub>2</sub> Allowances. VEPCO may not use the same SO<sub>2</sub> Allowance more than once. VEPCO may not use the SO<sub>2</sub> Allowances surrendered under this Section for any other purpose, including, but not limited to, any sale or trade of such Allowances for use by any person other than VEPCO or by any Unit not part of the VEPCO System, except as provided by Paragraph 73 ("Alternate Method of Surrender"). Other than the limits stated in this Decree on use of SO<sub>2</sub> Allowances or limits imposed by law, this Decree imposes no other limits on how VEPCO may use SO<sub>2</sub> Allowances.
- 77. No Entitlement Created. This Consent Decree does not entitle VEPCO to any allocation of SO<sub>2</sub> Allowances under the Act.

### VII. PM EMISSION REDUCTIONS AND CONTROLS

VEPCO shall (A) commence operation no later than two hours after commencement of combustion of any amount of coal in the controlled System Unit, except that this requirement shall apply to Bremo Power Station Units 3 and 4 commencing two hours after cessation of oil injection to the boiler, and provided that, for all ESP-equipped Units, "combustion of any amount of coal include combustion of coal that is the result of clearing out a Unit's coal mills as the Unit is returned to service; (B) fully energize each available portion of each

ESP, except those ESP fields that have been out of service since at least January 1, 2000, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices, and repair such fields that go out of service consistent with the requirements of this Paragraph; (C) maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; and (D) continuously operate each ESP and baghouse in compliance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. Whenever any element of any ESP that has been in service at any time since January 1, 2000 fails, does not perform in accordance with manufacturers' specifications and good engineering practices, or does not operate in accordance with the standards set forth in this Paragraph, VEPCO shall use best efforts to repair the element no later than the next available Unit outage appropriate to the repair task. The requirements of this Paragraph do not apply to Possum Point Units 3 and 4 until January 1, 2004, and do not apply at all when those Units burn natural gas.

79. ESP and Baghouse Optimization Studies and Recommendations. VEPCO shall complete an optimization study, in accordance with the schedule below, for each VEPCO System Unit served by an ESP or baghouse (except Possum Point Units 3 and 4, in light of their conversion to natural gas), which shall recommend: the best available maintenance, repair, and operating practices that will optimize ESP or baghouse availability and performance in accordance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. These studies shall consider any ESP elements not in service prior to January 1, 2000, to the extent changes to such elements may be required to meet a PM Emission Rate of 0.030 lb/mmBTU. Any operating practices or procedures developed and approved under this

Paragraph shall become a part of the standard specified in (D) of Paragraph 78 ("Use of Existing PM Pollution Control Equipment"), above, and shall be implemented in compliance with that Paragraph. VEPCO shall retain a qualified contractor to assist in the performance and completion of each study. VEPCO shall submit each completed study to the United States for review and approval. (The United States will consult with the other Plaintiffs before completing such review). VEPCO shall implement the study's recommendations within 90 days (or any longer time period approved by the United States) after receipt of approval by the United States. If VEPCO seeks more than 90 days to implement the recommendations contained in the study, then VEPCO shall include, as part of the study, the reasons why more than 90 days are necessary to implement the recommendations, e.g., the need to order or install parts or equipment, retain specialized expertise, or carry out training exercises. VEPCO shall maintain each ESP and baghouse as required by the study's recommendations and shall supplement the ESP operational standard in (D) of Paragraph 78 to include any operational elements of the study and its recommendations. The schedule for completion and submission to the United States of the optimization studies shall be as follows:

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Number and Choice of VEPCO System Units on Which VEPCO Shall Complete and Submit Optimization Studies	Number of Months After Lodging of the Decree that VEPCO Shall Submit Optimizations Studies to the U.S.
Four Units (including at least one Unit at Mount Storm or Chesterfield)	12 Months
Three More Units (including at least two at any one or more of the following VEPCO stations – Mount Storm, Chesterfield, and Bremo, if not already done)	24 Months

Two More Units (including at least two located at any one or more of the following VEPCO stations – Mount Storm, Chesterfield, and Bremo, if not already done)	36 Months
Two More Units	48 Months
Two More Units	60 Months
All Other Units	72 Months /4/ 9

- 80. Alternative to Pollution Control Upgrade Analysis. Within 270 days after VEPCO receives the United States' approval of the ESP optimization study for a VEPCO System Unit, VEPCO may elect to achieve for any Unit the objectives of, and thereby avoid, the Pollution Control Upgrade Analysis otherwise required by this Section by certifying to the United States, in writing, that: (A) the ESP shall continue to be operated and maintained in compliance with the approved optimization plan, pursuant to Paragraphs 78 and 79 of this Section, respectively, and (B) that the enforceable PM emission limit for this Unit shall be 0.030 lb/mmBTU, either commencing immediately or on and after the date required by this Decree for completion of FGD installations or improvements at that Unit (or after installation of any other FGD system VEPCO chooses to install at a Unit prior to 2013). Otherwise, VEPCO shall comply with Paragraph 82 (Pollution Control Upgrade Analysis, Construction of PM Controls, Compliance with New Emission Rate'), below.
- 81. PM Emission Rate Determination. The methods specified in this Paragraph shall be the reference methods for determining PM Emission Rates along with any other method approved by EPA under its authority to establish or approve such methods. The PM Emission Rates established under Paragraph 80 of this Section shall not apply during periods of "startup" and "shutdown" or during periods of control equipment or Unit malfunction, if the malfunction meets

the requirements of the Force Majeure Section of this Consent Decree. Periods of "startup" shall not exceed two hours after any amount of coal is combusted (except that for Bremo Power Station Units 3 and 4, this two-hour period begins upon cessation of injection of oil into the boiler). Periods of "shutdown" shall only commence when the Unit ceases burning any amount of coal (or in the case of Bremo Power Station Units 3 and 4, when any oil is introduced into the boiler). Coal shall not be deemed to be combusted if it is burned as a result of clearing out a Unit's coal mills as the Unit is returned to service. The reference methods for determining PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5 or Method 17, using annual stack tests. VEPCO shall calculate PM Emission rates from the annual stack tests in accordance with 40 C.F.R. 60.8(f) and 40 C.F.R. 60.48a(b). The annual stack-testing requirement of this Paragraph shall be conducted as described in Paragraph 95 and may be satisfied by: (A) any annual stack tests VEPCO may conduct pursuant to its permits or applicable regulations from the States of Virginia and West Virginia if such tests employ reference test methods allowed under this Decree, or (B) installation and operation of PM CEMs required under this Decree.

82. Pollution Control Upgrade Analysis of PM, Construction of PM Controls, Compliance with New Emission Rate. For each VEPCO System Unit served by an ESP -- other than Possum Point Units 3 and 4 and those Units that meet the requirements of Paragraph 80 ("Alternative to Pollution Control Upgrade Analysis") -- VEPCO shall complete a Pollution Control Upgrade Analysis and shall deliver the Analysis and supporting documentation to the United States for review and approval (after consultation with the other Plaintiffs). Notwithstanding the definition of Pollution Control Upgrade Analysis (Paragraph 38), VEPCO shall not be required to consider

in this Analysis: (A) the replacement of any existing ESP with a new ESP, scrubber, or baghouse, or (B) the installation of any supplemental pollution control device similar in cost to a replacement ESP, scrubber, or baghouse (on a total dollar-per-ton-of-pollution-removed basis).

- 83. VEPCO shall retain a qualified contractor to assist in the performance and completion of each Pollution Control Upgrade Analysis. Within one year of the United States' approval of the work and recommendation(s) made in the Analysis (or within a longer period of time properly sought by VEPCO and approved by the United States), VEPCO shall complete all recommendation(s). If VEPCO seeks more than one year from the date of the United States' approval of the Analysis to complete the work and recommendations called for by the Analysis, VEPCO must state the amount of additional time required and the reasons why additional time is necessary. Thereafter, VEPCO shall operate each ESP in compliance with the work and recommendation(s), including compliance with the specified Emission Rate. The schedule for completion and submission to the United States of the Pollution Control Upgrade Analyses for each Unit subject to this Paragraph shall be 12 months after the United States approves the ESP optimization study for each Unit pursuant to Paragraph 79 (unless VEPCO has elected to use the alternative to the Pollution Control Upgrade Analysis under Paragraph 80 for the Unit).
- 84. Performance Testing of Equipment Required by Pollution Control Upgrade Analysis.

  Between 6 and 12 months after VEPCO completes installation of the equipment called for by each approved Pollution Control Upgrade Analysis, VEPCO shall conduct a performance test demonstration to ensure that the approved PM emission limitation set forth in the Analysis can be consistently achieved in practice, including all requirements pertaining to proper operation and maintenance of control equipment. If the performance demonstration shows that the

approved control equipment cannot consistently meet the required PM emission limitation,

VEPCO shall revise the Pollution Control Upgrade Analysis and resubmit it to the United States

for review and approval of an alternative emissions limitation.

- 85. Installation and Operation of PM CEMs. VEPCO shall install, calibrate, operate, and maintain PM CEMs, as specified below. Each PM CEM shall be comprised of a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert results to units of lb/mmBTU. VEPCO may select any type of PM CEMS that meets the requirements of this Consent Decree. VEPCO shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/mmBTU. During Unit startups, VEPCO shall begin operating the PM CEMs in accordance with the standards set out in Paragraph 78(A) ("Use of Existing PM Pollution Control Equipment"), and VEPCO shall thereafter use reasonable efforts to keep each PM CEM running and producing data whenever any Unit served by the PM CEM is operating. VEPCO shall submit to EPA for review and approval a plan to install, calibrate and operate each PM CEM. VEPCO shall thereafter operate each PM CEM in accordance with the approved plan.
- 86. <u>Installation of PM CEMs First Round (Three Units)</u>. On or before December 1, 2003, VEPCO shall designate which three VEPCO System Units will have PM CEMs installed, in accordance with this Paragraph. No later than 12 months after entry of this Decree (or a longer time period approved by the United States, not to exceed 18 months after entry of this Decree) VEPCO shall install, calibrate, and commence operation of the following:
  - (A) PM CEMs in the stacks that service at least two of the following VEPCO System
    Units: Mount Storm Units 1, 2, and 3, and Clover Units 1 and 2; and

(B) at least one additional PM CEM at any other ESP-equipped Unit in the VEPCO System, as selected by VEPCO.

If VEPCO seeks more than 12 months after entry of the Decree to complete installation and calibration of the PM CEMs, then VEPCO shall include a full explanation of the reasons why it requires more than 12 months after entry of the Decree to complete installation and calibration.

- 87. Consultation Before the First Round of PM CEMs. Prior to installing any PM CEMs,

  VEPCO and the United States shall meet, consult, and agree to adequate mechanisms for treating

  potential emission limitation exceedances that may occur during installation and calibration

  periods of the PM CEMs that may exceed applicable PM emission limitations. VEPCO and the

  United States shall invite the States of Virginia and West Virginia to participate in these

  discussions.
- 88. Option for Consultation Both Before and After Installation of the First or Second Round of PM CEMs. Either before the first or second round of PM CEMs installations, or after such PM CEMs are installed and producing data, or both, the United States and VEPCO shall meet, upon the request of either, to examine further the data that may or may not be generated by the PM CEMs. This issue should be addressed in light of the regulatory or permit-based mass emission limit set for the Unit before it was equipped with a PM CEM or any PM emission limitation established or to be established under this Section of the Decree, and the parties should take appropriate and acceptable actions to address any issues concerning periodic short term Unit process and control device upsets and/or averaging periods. In the event VEPCO or the United States call for such a meeting, the United States and VEPCO shall invite the States of Virginia and West Virginia to participate.

- Demonstration that PM CEMs Are Infeasible. No earlier than 2 years after VEPCO has installed the first round of PM CEMs, VEPCO may attempt to demonstrate that it is infeasible to continue operating PM CEMs. As part of such demonstration, VEPCO shall submit an alternative PM monitoring plan for review and approval by the United States. The plan shall explain the basis for stopping operation of the PM CEMs and propose an alternative-monitoring plan. If the United States disapproves the alternative PM monitoring plan, or if the United States rejects VEPCO's claim that it is infeasible to continue operating PM CEMs, such disagreement is subject to Section XXVII ("Dispute Resolution").
- 90. "Infeasible to Continue Operating PM CEMs" Standard. Operation of a PM CEM shall be considered "infeasible" if, by way of example, the PM CEMS: (A) cannot be kept in proper condition for sufficient periods of time to produce reliable, adequate, or useful data; or (B) VEPCO demonstrates that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources; or (C) chronic and difficult Unit operation issues cannot be resolved through reasonable expenditure of resources; or (D) the data produced by the CEM cannot be used to assess PM emissions from the Unit or performance of the Unit's control devices. If the United States determines that VEPCO has demonstrated infeasibility pursuant to this Paragraph, VEPCO shall be entitled to discontinue operation of and remove the PM CEMs.
- 91. PM CEM Operations Will Continue During Dispute Resolution or Proposals for Alternative Monitoring. Until the United States approves an alternative monitoring plan or until the conclusion of any proceeding under Section XXVII ("Dispute Resolution"), VEPCO shall continue operating the PM CEMs. If EPA has not issued a decision regarding an alternative

monitoring plan within 90 days VEPCO may initiate action under the Dispute Resolution provisions (Section XXVII) under this Consent Decree.

- 92. <u>Installation and Operation of PM CEMs Second Round (6 Units)</u>. Unless VEPCO has been allowed to cease operation of the PM CEMs under Paragraph 89 ("Demonstration that PM CEMs Are Infeasible"), then VEPCO shall install, calibrate, and commence operation of PM CEMs that serve at least 6 more Units. In selecting the VEPCO System Units to receive PM CEMs under this second round, VEPCO must assure that Mount Storm Units 1, 2, and 3 and Clover Units 1 and 2 all receive PM CEMs if they have not already received PM CEMs under the first round. VEPCO may select the other VEPCO System Units to receive the required PM CEMs. The options for consultation regarding first round PM CEMs under Paragraphs 87 and 88 shall also be available for second round PM CEMs. VEPCO shall install PM CEMs that serve two VEPCO System Units in each of the years 2007, 2008, and 2009 under this second round of PM CEMs.
- 93. <u>Common Stacks</u>. Installation of a PM CEM on Mount Storm Units 1 and 2 or on Yorktown Units 1 and 2 shall count as installation of PM CEMs on 2 units in recognition of the common stack that serves these Units. VEPCO and the United States shall agree in writing on the method for apportioning emissions to the Units served by common stacks.
- 94. <u>Data Use</u>. Data from PM CEMs shall be used by VEPCO, at minimum, to monitor progress in reducing PM emissions. Nothing in this Consent Decree is intended to or shall alter or waive any applicable law (including, but not limited to, any defense, entitlements, challenges, or clarifications related to the Credible Evidence Rule (62 Fed. Reg. 8314 (Feb. 27, 1997))) concerning the use of data for any purpose under the Act, generated either by the reference

methods specified herein or otherwise.

Other Testing and Reporting Requirements. Commencing in 2004, VEPCO shall conduct a stack test for PM on each stack servicing each Unit in the VEPCO System (excluding Possum Point Units 3 and 4 in 2004, and in any subsequent year in which such Units have not burned coal). Such PM stack testing shall be conducted at least once per every four successive "QA Operating Quarters" (as defined in 40 C.F.R. § 72.2) and the results of such testing shall be submitted to the Plaintiffs as part of the periodic reporting under Section XIX ("Periodic Reporting") and Appendix B. Following installation of each PM CEM, VEPCO shall include all data recorded by PM CEMs, including submission in electronic format, if available, in the reports required by Section XIX.

# VIII. POSSUM POINT UNITS 3 & 4: FUEL CONVERSION, INSTALLATION OF CONTROLS

96. Fuel Conversion. VEPCO shall cease all combustion of coal at Possum Point Units 3 and 4 prior to May 1, 2003, in preparation for the conversion of Possum Point Units 3 and 4 to operate on natural gas, and shall not operate these Units again until that fuel conversion is complete and the Units are firing natural gas. VEPCO shall continuously operate such equipment to control NOx emissions in compliance with State permitting requirements. VEPCO also shall limit the combined emissions from Possum Point Units 3 and 4 to 219 tons of NOx in any 365 days, rolled daily, and determined as follows: Add the total NOX emissions from Possum Point Units 3 and 4 on any given day, occurring after entry of this Decree, to the total NOX emissions from those two Units for the preceding 364 consecutive days occurring after

entry of the Decree; the sum of those emissions may never exceed 219 tons. If VEPCO exceeds this 219-ton limit, VEPCO shall install and operate SCR at BACT levels within 3 years of the exceedance at either Yorktown Unit 1 (173 MW), or Yorktown Unit 2 (183 MW), or Bremo Unit 4 (170 MW). VEPCO may select which of these Units receives the SCR so long as the following are true for the Unit:

- (A) An SCR is not required under regulatory requirements for the Unit;
- (B) VEPCO had not planned to install an SCR on such Unit to help comply with any requirement as of the day of exceedance at Possum Point; and
- (C) The Unit is not required to meet an emission rate that would call for installation of SCR.

If these conditions are not met for any of the three listed Units, then VEPCO shall install the required SCR at the next largest Unit (in MW) within the VEPCO System that meets the conditions of subparagraphs (A) through (C).

- 97. Return to Combustion of Coal After Gas Conversion. If VEPCO uses coal rather than natural gas to operate Possum Point Units 3 or 4 on or after May 1, 2003, VEPCO shall install controls on such Unit(s) and meet the following requirements for NO<sub>x</sub>, SO<sub>2</sub>, and PM emissions, on or after May 1, 2003:
  - (A) For NO<sub>x</sub>, the more stringent of: (i) a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU or (ii) the NO<sub>x</sub> emission rate that would be LAER at the time that VEPCO returns to firing Possum Point Units 3 or 4 with coal;
  - (B) For SO<sub>2</sub>, a 30-Day Rolling Average Removal Efficiency of at least 95.0%; and
  - (C) For PM, an Emission Rate of no more than 0.030 lb/mmBTU.

98. <u>Measurements At Possum Point</u>. The applicable methods and rules specified in other portions of this Decree for measuring emission rates and removal efficiencies for NO<sub>x</sub>, SO<sub>2</sub>, and PM also apply to the emission standards, as applicable, established under Paragraph 96 and 97 ("Fuel Conversion" and "Return to Combustion of Coal After Gas Conversion") for Possum Point Units 3 and 4.

# IX. INSTALLING ADDITIONAL CONTROLS ON VEPCO SYSTEM UNITS

- 99. If, prior to November 1, 2004, this Consent Decree is modified to require that VEPCO:
  - (A) Install additional NO<sub>x</sub> or SO<sub>2</sub> pollution control devices on a VEPCO System Unit not scheduled for installation of such control device as part the original Decree;
  - (B) Commence full-time (year-round) operation of such control device no later than January 1, 2008; and
  - (C) Operate the control device and the Unit it serves in compliance with a performance standard of 0.100 lb/mmBTU 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or a 95.0% 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub>;

then the modification of the Consent Decree shall also provide that such Unit be treated as an Improved Unit as to the pollutant that has been controlled in compliance with this Section.

100. <u>Reference Methods</u>. The reference and monitoring methods specified in other portions of this Decree for measuring all emission rates and removal efficiencies for NO<sub>x</sub>, SO<sub>2</sub>, and PM also apply to the emission standards established under this Section.

# X. PERMITS

- Decree, in any instance where otherwise applicable law or this Consent Decree require VEPCO to secure a permit to authorize constructing or operating any device under this Consent Decree, VEPCO shall make such application in a timely manner. Such applications shall be completed and submitted to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request. Failure to comply with this provision shall allow Plaintiffs to bar any use by VEPCO of Section XXVI ("Force Majeure") where a Force Majeure claim is based upon permitting delays.
- New Source Review Permits. This Consent Decree shall not be construed to require VEPCO to apply for or obtain a permit pursuant to the New Source Review requirements of Parts C and D of Title I of the Act for any work performed by VEPCO within the scope of the resolution of claims provisions of Sections XI through XVII (Resolution of Certain Civil Claims).103. Title V Permits. Whenever VEPCO applies for a Title V permit or a revision to such a permit, VEPCO shall send, at the same time, a copy of such application to each Plaintiff. Also, upon receiving a copy of any permit proposed for public comment as a result of such application, VEPCO shall promptly send a copy of such proposal to each Plaintiff, thereby allowing for timely participation in any public comment opportunity.
- 104. <u>Title V Permits Enforceable on Their Own Terms</u>. Notwithstanding the reference to Title V permits in this Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be directly enforceable under this Decree, though any term or limit established by or under this Decree shall be enforceable under this

Decree regardless of whether such term has or will become part of a Title V Permit, subject to the limits of Section XXX ("Conditional Termination of Enforcement, Continuation of Terms, and First Resort to Title V Permit").

- Whenever VEPCO applies for Title V Permit(s), or for amendment(s) to existing

  Title V Permit(s), for the purpose of including the requirements of this Decree in such permits, VEPCO shall include in such application all performance, operational, maintenance, and control technology requirements specified by or created under this

  Consent Decree, not only for particular Units in the VEPCO System but also for the VEPCO System itself including, but not limited to, emission rates, removal efficiencies, allowance surrenders, limits on use of emission credits, and operation, maintenance and optimization requirements, unless otherwise limited by Sections XI through XVII. VEPCO shall notify all Plaintiffs of any applicable requirement within its Title V permit application that may be more stringent than the requirements of this Consent Decree.
- Methods to be Used in Applying for Title V Permit Provisions Applicable to the

  VEPCO System. VEPCO shall include provisions in any Title V permit

  application(s) submitted in accordance with Paragraph 105 ("Consent Decree

  Requirements To Be Proposed for Inclusion in Title V Permits") that comply with

  this Consent Decree's NO<sub>x</sub> VEPCO System Declining Tonnage Cap (Section IV,

  Paragraph 60), the VEPCO System-Wide Annual Average Emission Rate for NO<sub>x</sub>

  (Section IV, Paragraph 61), and the Annual Surrender of SO<sub>2</sub> Allowances from the

VEPCO System (Section VI, Paragraphs 71). In making such application, VEPCO shall use either the provisions listed below or any other method agreed to in advance by written stipulation of all the Parties and filed with this Court:

- (A) For the VEPCO System declining NO<sub>x</sub> cap in Section IV, Paragraph 61 ("VEPCO System NO<sub>x</sub> Limits 2002 and thereafter: Declining, System-Wide Tonnage Caps"), each Unit in the VEPCO System shall be limited in perpetuity to a specified portion of the NO<sub>x</sub> annual emissions cap that ultimately descends to 30,250 tons, provided the total of the VEPCO System declining tonnage caps for NO<sub>x</sub> submitted for inclusion in the Title V permits shall be no greater for any year than the tonnage specified for each calendar year for the VEPCO System). The NO<sub>x</sub> emission tons shall be allocated to each Unit within the VEPCO System. No Unit shall exceed its allocation except that VEPCO can trade NO<sub>x</sub> emissions tons between Units within the VEPCO System in order to comply with any given Unit-specific allocation. Compliance with the NO<sub>x</sub> Annual System-Wide Annual Average Emissions cap shall be determined each year by whether each Unit holds a sufficient number of NO<sub>x</sub> emission tons allocated to it in the Title V permit, or acquired by it through trades with other Units in the VEPCO System, to cover the Unit's actual, annual NO<sub>x</sub> emissions; and
- (B) For the System-Wide, Annual Average NO<sub>x</sub> Emissions Rate specified in Section IV, Paragraph 61, ("VEPCO System-Wide, Annual Average NO<sub>x</sub> Emission Rate")

  VEPCO shall prepare a VEPCO System-Wide NO<sub>x</sub> emissions BTU-weighted averaging plan for all the Units in the VEPCO System, and in doing so, shall use all the appropriate methods and procedures specified at 40 C.F.R. § 76.11 in preparing such a plan. As part

of that plan, VEPCO shall prepare an "alternative contemporaneous allowable annual emissions limitation" (in lb/mmBTU) for each Unit in the VEPCO System, as described by 40 C.F.R. § 76.11. After this allocation and establishment of an "alternative contemporaneous allowable annual emissions limitation," VEPCO's compliance with Paragraph 61 ("VEPCO System-Wide, Annual Average NO<sub>x</sub> Emission Rate") shall be determined in the manner described by 40 C.F.R. § 76.11, as applicable, and shall be based on whether each Unit meets the applicable "alternative contemporaneous allowable annual emissions limitation" for the NO<sub>x</sub> emissions BTU weighted averaging plan; provided, however, that if any Unit(s) does not meet such emissions limitation, such Unit(s) shall still be in compliance if VEPCO shows that all the Units in the emissions averaging plan, in aggregate, do not exceed the BTU-weighted NO<sub>x</sub> System-Wide Emissions Rate; and

(C) For the Annual Surrender of SO<sub>2</sub> Allowances required by Section VI, the annual SO<sub>2</sub> Allowance surrender requirement of 45,000 SO<sub>2</sub> Allowances shall either be divided up and allocated to specific Units of the VEPCO System or assigned to a single VEPCO System Unit – as VEPCO elects.

# XI. RESOLUTION OF CERTAIN CIVIL CLAIMS OF THE UNITED STATES.

107. <u>Claims Based on Modifications Occurring Before the Lodging of Decree</u>. Entry of this Decree shall resolve all civil claims of the United States under either: (i) Parts C or D of Subchapter I of the Clean Air Act or (ii) 40 C.F.R. Section 60.14, that arose from any

modification commenced at any VEPCO System Unit prior to the date of lodging of this Decree, including but not limited to, those modifications alleged in the U.S. Complaint in this civil action or in the EPA NOV issued to VEPCO on April 24, 2000.

- 108. Claims Based on Modifications after the Lodging of Decree. Entry of this Decree also shall resolve all civil claims of the United States for pollutants regulated under Parts C or D of Subchapter I of the Clean Air Act and regulations promulgated as of the date of the lodging of this Decree, where such claims are based on a modification completed before December 31, 2015 and:
  - A) commenced at any VEPCO System Unit after lodging of this Decree or
- B) that this Consent Decree expressly directs VEPCO to undertake.

  The term "modification" as used in this Paragraph shall have the meaning that term is given under the Clean Air Act statute as it existed on the date of lodging of this Decree.
- 109. Reopener. The resolution of the civil claims of the United States provided by this Section is subject to the provisions of Section XII.

# XII. REOPENING OF U.S. CIVIL CLAIMS RESOLVED BY SECTION XI

- 110. Bases for Pursuing Resolved Claims Across VEPCO System. If VEPCO:
  - (A) Violates Paragraph 59(A) or (B) (VEPCO System-Wide, Interim Control of NOX Emissions, 2004 through 2007); or
  - (B) Violates Paragraph 60 (VEPCO System-Wide NOX Tonnage Limits 2003 and thereafter: Declining, System-Wide Tonnage Caps); or

- (C) Violates Paragraph 61 (VEPCO System-Wide Average NOX Emission Rate) in any calendar year (or ozone season, as applicable); or
- (D) Fails by more than ninety days to complete installation of and commence timely year-round operation of any SCR or FGD required by Paragraphs 56 or 64 or Sections VIII or IX; or
- (E) Fails to limit VEPCO System SO2 emissions to 203,693 tons or less in each calendar year starting with 2005 and thereafter;

then the United States may pursue any claims at any VEPCO System Unit otherwise resolved under Section XI, where the modification(s) on which such claim is based was commenced, under way, or completed within five years preceding the violation or failure specified in items (A) through (E) above, unless such modification was undertaken at an Improved Unit and commenced prior to the date of lodging of this Consent Decree.

- 111. Other Units. The resolution of claims of United States in Section XI shall not apply to claims arising from modifications at Other Units commenced less than five years prior to the occurrence of one or more of the following:
  - (A) a modification or (collection of modifications) commenced after lodging of this Decree at such Other Unit, individually (or collectively) increase the maximum hourly emission rate for such Unit for the relevant pollutant (NOx or SO2) as measured by 40 C.F.R. § 60.14(b) and (h); or
  - (B) the aggregate of all Capital Expenditures made at such Other Unit exceed \$125/KW on the Unit's Boiler Island (based on the Maximum Dependable Capacity numbers in the North American Electric Reliability Council's Generating Availability

Database for the year 2002) during any of the following five-year periods: January 1, 2001, through December 31, 2005; January 1, 2006, through December 31, 2010; January 1, 2011, through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2000 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

- (C) modification(s) commenced after lodging of this Decree resulting in emissions increase(s) of the relevant pollutant that actually occurred from any such Other Unit, where such increase(s):
  - (1) present by themselves or in combination with other emissions or sources "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. § 7603; or
  - (2) cause or contribute to violation of a National Ambient Air Quality
    Standard in any Air Quality Control Area that is in attainment with that NAAQS;
    or
  - (3) cause or contribute to violation of a PSD increment; or
  - (4) cause or contribute to any adverse impact on any formally recognized air quality and related values in any Class I area.
- 112. Solely for purposes of Subparagraph 111(C), above: (i) the determination of whether emissions increase(s) of the relevant pollutant actually occurred at the Unit must take into account any emissions changes relevant to the modeling domain that have occurred or will occur under this Decree at other VEPCO System Units; and (ii) an emissions increase shall not be deemed to have actually occurred unless annual emissions of the relevant pollutant from all

VEPCO System Units at the plant at which such Unit is located (and treating Mount Storm and North Branch as a single plant for this purpose) have exceeded such plant's emissions of that pollutant after the lodging of this Consent Decree, as specified below:

Plant	SO2 Annual Emissions (tons)	NOX Annual Emissions (tons)
Bremo	13,463	4,755
Chesapeake	35,923	10,657
Chesterfield	75,330	15,858
Clover	Improved	10,076
Mt. Storm / North Branch	19,992	40,188
Yorktown	26,755	5,066

- 113. Introduction of any new or changed National Ambient Air Quality Standard shall not, standing alone, provide the showing needed under Subparagraph 111(C) (1)-(4) to pursue any claim resolved under Section XI.
- 114. <u>Fuel Limit.</u> The resolution of claims provided by Section XI shall not apply to any modification commenced on a Unit within five years prior to the date on which VEPCO:

- (A) fires such Unit with any fuel or fuel mix that is either prohibited by applicable state law or that is not otherwise authorized by the relevant state; or
- (B) increases the current (as of February 1, 2003) coal contracting bid\_specification or contract specifications that limit fuel sulfur content in securing coal for a Unit, as summarized in Appendix A. This Paragraph does not apply to VEPCO's use of: (i) a fuel or fuel mix specifically called for by this Decree, if any, or (ii) any coal in any coal-fired Unit regardless of the fuel's sulfur content, so long as such use occurs after the Unit is being served by an FGD or other control equipment that can maintain 95.0% Removal Efficiency for SO2, on a 30-day, rolling average basis.
- 115. <u>Improved Units</u>. The resolution of claims provided by Section XI shall not apply to a modification (or collection of modifications), if commenced after the lodging of this Decree at an Improved Unit, that individually (or collectively) increase the maximum hourly emission rate of that Unit for NO<sub>x</sub> or SO<sub>2</sub> (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%) of the maximum hourly emission rate for that Unit.

# XIII. RESOLUTION OF PAST CLAIMS OF NEW YORK, NEW JERSEY, AND CONNECTICUT

116. The States of New York, New Jersey, and Connecticut agree that this Decree resolves all of the following civil claims that have been or could have been brought against VEPCO for violations at Units at Mount Storm, Chesterfield or Possum Point prior to the lodging of this Decree:

(A) The Prevention of Significant Deterioration or Non- Attainment provisions of Parts C and D of the Clean Air Act, 42 U.S.C. § 7401 et seq. and related state provisions; and(B) 40 C.F.R. § 60.1.

# XIV. RESOLUTION OF CIVIL CLAIMS OF THE COMMONWEALTH OF VIRGINIA.

- 117. Claims Based on Modifications Occurring Before the Lodging of Decree. Subject to the specific limitations in this Section, entry of this Decree shall resolve all civil and administrative claims of the Commonwealth of Virginia that arose from any modification (physical change or change in the method of operation, including construction of any air pollution control project at any VEPCO System Unit) under applicable federal statutes (Section 7410 (a)(2)(C), Part C or D of Subchapter I of the Clean Air Act or 40 CFR Section 60.14) or applicable state regulations (Article 6 (9 VAC 5-80-1100 et seq.), Article 8 (9 VAC 5-80-1700 et seq.) or Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80, and provisions of 9 VAC 5, Chapter 50, that are equivalent to 40 C.F.R. § 60.14(a)), and, as to the state regulations, all applicable predecessor regulations. This Paragraph shall apply to any modification commenced at any VEPCO System Unit located in the Commonwealth prior to the date of lodging of this Decree.
- 118. Claims Based on Modifications after the Lodging of Decree. Subject to the specific limitations in this Section, entry of this Decree shall also resolve all civil and administrative claims of the Commonwealth of Virginia arising from any modification (physical change or change in the method of operation, including construction of any air pollution control project at any VEPCO system Unit) under applicable federal statutes (Section 7410 (a)(2)(C), Part C or D of Subchapter I of the Clean Air Act) or applicable state regulations (Article 6 (9 VAC 5-80-

1100 et seq.), Article 8 (9 VAC 5-80-1700 et seq.) or Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80 and any successor regulations). This Paragraph shall apply to any modification at any VEPCO System Unit located in the Commonwealth commenced on or after lodging of this Decree that is completed before December 31, 2015, or are those that this Consent Decree expressly directs VEPCO to undertake.

- 119. Reopener. The resolution of the civil claims of the Commonwealth of Virginia provided by this Section is subject to the provisions of Section XV.
- 120. General. Each term used in Paragraph 118 that is also a term used under the Clean Air Act shall mean what such term means under the Act as it existed on the date of lodging of this Decree.
- 121. Commonwealth's Authority Regarding NAAQS Exceedances. Nothing in this Section shall be construed to affect the Commonwealth's authority under applicable federal statutes and applicable state regulations to impose appropriate requirements or sanctions on any VEPCO System Unit when emissions from the plant at which such unit is located result in violation of, or interfere with the attainment and maintenance of, any ambient air quality standard, or the plant fails to operate in conformance with any applicable control strategy, including any emissions standards or emissions limitations.
- 122. Nothing in this Section shall prevent the Commonwealth from issuing to any VEPCO System Unit a permit under either Article 5 (9 VAC 5-80-800 et seq.) or Article 6 (9 VAC 5-80-1100 et seq.) for the purpose of preserving the terms and conditions of this Decree as applicable federal requirements upon the expiration of the Decree.

# XV. REOPENING OF VIRGINIAS' CLAIMS RESOLVED BY SECTION XIV

- 123. Bases for Pursuing Resolved Claims Across VEPCO System. If VEPCO:
  - (A) Violates Paragraph 59(A) or (B) (VEPCO System-Wide, Interim Control of NOx Emissions, 2004 through 2007); or
  - (B) Violates Paragraph 60 (VEPCO System-Wide NOx Tonnage Limits 2003 and thereafter: Declining, System-Wide Tonnage Caps): or
  - (C) Violates Paragraph 61 (VEPCO System-Wide Average NOx Emission Rate) in any calendar year (or ozone season, as applicable); or
  - (D) Fails by more than ninety days to complete installation of and commence timely year-round operation of any SCR or FGD required by Paragraphs 56 or 64 or Sections VIII or IX; or
  - (E) Fails to limit VEPCO System SO2 emissions to 203,693 tons or less in each calendar year starting with 2005 and thereafter;

then the Commonwealth of Virginia may pursue any claims at any VEPCO System Unit located in the Commonwealth otherwise resolved under Section XIV. where the modification(s) on which such claim is based was commenced, under way, or completed within five years preceding the violation or failure specified above, unless such modification was undertaken at an Improved Unit and commenced prior to the date of lodging of this Consent Decree.

- 124. Other Units. The resolution of claims of the Commonwealth of Virginia in Section XIV shall not apply to claims arising from modifications at Other Units located in the Commonwealth commenced less than five years prior to the occurrence of one or more of the following:
  - (A) One or more modifications at such Other Unit commenced after lodging of this Decree, individually or collectively, increase the maximum hourly emission rate for such Unit for the relevant pollutant (NOx or SO2) as measured by 40 C.F.R. § 60.14(b) and (h); or
  - (B) The aggregate of all Capital Expenditures made at such Other Unit is in excess of \$125/KW on the Unit's Boiler Island (based on the Maximum Dependable Capacity numbers in the North American Electric Reliability Council's Generating Availability Database for the year 2002) during any of the following five-year periods: January 1, 2001, through December 31, 2005; January 1, 2006, through December 31, 2010; January 1, 2011, through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2000 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or
  - (C) Modification(s) commenced after lodging of this Decree resulting in emissions increase(s) of the relevant pollutant that actually occurred from any such Other Unit, where such increase(s):
    - (1) present by themselves or in combination with other sources "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 .

      U.S.C. § 7603; or

- (2) cause or contribute to violation of a National Ambient Air Quality

  Standard in any Air Quality Control Area that is in attainment with that NAAQS;

  or
- (3) cause or contribute to violation of a PSD increment; or
- (4) cause or contribute to any adverse impact on any formally recognized air quality and related values in any Class I area.

Solely for purposes of this Subparagraph (C), (1) determination of whether there is an emissions increase that actually occurred resulting from modification(s) at the Unit must take into account any emissions changes relevant to the modeling domain that have occurred or will occur under this Decree at other VEPCO System Units; and (2) no such increase from a Unit will be deemed to have occurred if annual emissions of the relevant pollutant from all VEPCO System Units at the plant at which such Unit is located (and treating Mount Storm and North Branch as a single plant for this purpose) do not exceed such plant's emissions of that pollutant after lodging of this Consent Decree, as specified in Paragraph 112. Also, introduction of any new or changed National Ambient Air Quality Standard shall not, standing alone, provide the showing needed under this Subparagraph (C) (1)-(4) to pursue any claim resolved under Section XIV.

125. <u>Improved Units</u>. The resolution of claims provided by Section XIV shall not apply to a modification (or collection of modifications), if commenced after lodging of this Decree, at an Improved Unit located in the Commonwealth that individually (or collectively) increase the maximum hourly emission rate of that Unit for NO<sub>x</sub> or SO<sub>2</sub> (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%) of the maximum hourly emission rate for that Unit.

#### XVI. RESOLUTION OF CIVIL CLAIMS OF THE STATE OF WEST VIRGINIA

Claims Based on Modifications Occurring Before the Lodging of Decree. Subject to the 126. specific limitations in this Section, entry of this Decree shall resolve all civil claims of the State of West Virginia that arose under applicable federal statutes and regulations (Section 7410 (a)(2)(C), Parts C or D of Subchapter I of the Clean Air Act or 40 CFR Section 60.14) or applicable state regulations (45CSR13, 45CSR14 and 45CSR19, as well as the provisions of 45CSR16 that are equivalent to 40 CFR Section 60.14(a)) and, as to the state regulations, all applicable predecessor regulations, from any modification (physical change or change in the method of operation, including but not limited to construction of any air pollution control project at any VEPCO System Unit). This Paragraph shall apply to any modification at any VEPCO System Unit located in West Virginia commenced prior to the date of lodging of this Decree. 127. Claims Based on Modifications after the Lodging of Decree. Subject to the specific limitations in this Section, entry of this Decree shall also resolve all civil claims of the State of West Virginia arising under applicable federal statutes (Section 7410 (a)(2)(C) and Parts C or D of Subchapter I of the Clean Air Act) or applicable state regulations (45CSR13, 45CSR14 and 45CSR19 and any successor regulations from any modification (physical change or change in the method of operation, including but not limited to construction of any air pollution control project at any VEPCO system Unit. This Paragraph shall apply to any modification at any VEPCO System Unit located in West Virginia commenced on or after the date of lodging of this Decree that is completed before December 31, 2015, or is among those that this Consent Decree expressly directs VEPCO to undertake.

- 128. Reopener. The resolution of the civil claims of the State of West Virginia provided by this Section is subject to the provisions of Section XVII.
- 129. <u>General.</u> Each term used in Paragraph 127 that is also a term used under the Clean Air Act shall mean what such term means under the Act as it existed on the date of lodging of this Decree.
- 130. West Virginia's Authority Regarding NAAQS Exceedances. Nothing in this Decree shall be construed to affect West Virginia's authority under applicable federal statutes and applicable state statutes or regulations to impose appropriate requirements or sanctions on any VEPCO System Unit when emissions from the plant at which such unit is located result in violation of, or interfere with the attainment and maintenance of, any ambient air quality standard, or the plant fails to operate in conformance with any applicable control strategy, including any emissions standards or emissions limitations.
- 131. Nothing in this Section shall prevent West Virginia from issuing to any VEPCO System Unit a permit under either 45CSR13 or 45CSR14) for the purpose of preserving the terms and conditions of this Decree as applicable federal requirements upon the expiration of the Decree.

#### XVII. REOPENING OF WEST VIRGINIA'S CLAIMS RESOLVED BY SECTION XVI.

- 132. <u>Bases for Pursuing Resolved Claims Across VEPCO System.</u> If VEPCO:
  - (A) Violates Paragraph 59(A) or (B) (VEPCO System-Wide, Interim Control of NOx Emissions, 2004 through 2007); or
  - (B) Violates Paragraph 60 (VEPCO System-Wide NOx Tonnage Limits 2003 and thereafter: Declining, System-Wide Tonnage Caps); or

- (C) Violates Paragraph 61 (VEPCO System-Wide Average NOx Emission Rate) in any calendar year (or ozone season, as applicable); or
- (D) Fails by more than ninety days to complete installation of and commence timely year-round operation of any SCR or FGD required by Paragraphs 56 or 64 or Sections VIII or IX; or
- (E) Fails to limit VEPCO System SO2 emissions to 203,693 tons or less in each calendar year starting with 2005 and thereafter;

then the State of West Virginia may pursue any claims at any VEPCO System Unit located in the state otherwise resolved under Section AA, where the modification(s) on which such claim is based was commenced, under way, or completed within five years preceding the violation or failure specified above, unless such modification was undertaken at an Improved Unit and completed prior to the date of lodging of this Consent Decree.

- 133. Other Units. The resolution of claims of the State of West Virginia in Section AA shall not apply to claims arising from modifications at Other Units located in West Virginia commenced less than five years prior to the occurrence of one or more of the following:
  - (A) One or more modifications at such Other Unit, individually or collectively, increase the maximum hourly emission rate for such Unit for the relevant pollutant (NOx or SO2) as measured by 40 C.F.R. § 60.14(b) and (h); or
  - (B) The aggregate of all Capital Expenditures made at such Other Unit is in excess of \$125/KW on the Unit's Boiler Island (based on the Maximum Dependable Capacity numbers in the North American Electric Reliability Council's Generating Availability Database for the year 2002) during any of the following five-year periods: January 1,

2001, through December 31, 2005; January 1, 2006, through December 31, 2010; January 1, 2011, through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2000 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

- (C) Modification(s) resulting in emissions increase(s) of the relevant pollutant that actually occurred from any such Other Unit, where such increase(s):
  - (1) present by themselves or in combination with other sources "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. § 7603; or
  - (2) cause or contribute to violation of a National Ambient Air Quality.

    Standard in any Air Quality Control Area that is in attainment with that NAAQS; or
  - (3) cause or contribute to violation of a PSD increment; or
  - (4) cause or contribute to any adverse impact on any formally recognized air quality and related values in any Class I area.

Solely for purposes of this Subparagraph (C), (i) determination of whether there is an emissions increase that actually occurred resulting from modification(s) at the Unit must take into account any emissions changes relevant to the modeling domain that have occurred or will occur under this Decree at other VEPCO System Units; and (ii) no such increase from a Unit will be deemed to have occurred if annual emissions of the relevant pollutant from all VEPCO System Units at the plant at which such Unit is located (and treating Mount Storm and North Branch as a single

plant for this purpose) do not exceed such plant's emissions of that pollutant, as specified in Paragraph 112. Also, introduction of any new or changed National Ambient Air Quality Standard shall not, standing alone, provide the showing needed under this Subparagraph (C) (1)-(4) to pursue any claim resolved under Section XVI.

134. <u>Improved Units</u>. The resolution of claims provided by Section XVI shall not apply to a modification (or collection of modifications), if commenced after lodging of this Decree, at an Improved Unit located in West Virginia that individually (or collectively) increase the maximum hourly emission rate of that Unit for NO<sub>x</sub> or SO<sub>2</sub> (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%) of the maximum hourly emission rate for that Unit.

# XVIII. OTHER PROVISIONS ON ALLOWANCES AND CREDITS

- 135. NO<sub>x</sub> Credits. For any and all actions taken by VEPCO to conform to the requirements of this Decree, VEPCO shall not use or sell any resulting NO<sub>x</sub> emission allowances or credits in any emission trading or marketing program of any kind; provided, however that:
  - (A) NO<sub>x</sub> emission allowances or credits allocated to the VEPCO System by the

    Administrator of EPA under the Act, or by any State under its SIP in response to

    the EPA NO<sub>x</sub> SIP Call, or the EPA Section 126 Rulemaking, or any other similar

    emissions trading or marketing program of any kind, may be used by VEPCO and

    its parent company (Dominion Resources) or its subsidiaries or affiliates to meet

    their own federal and/or state Clean Air Act regulatory requirements for any air

    emissions source owned or operated, in whole or in part, by VEPCO or Dominion

    Resources, Inc. or its subsidiaries or affiliates and;

- (B) VEPCO may trade in any federal or state program any NO<sub>x</sub> emissions allowances which are generated from VEPCO's operating its SCRs, or equivalent control technology, at Chesterfield Units 4, 5, and 6; or Chesapeake Units 3 and 4; or any VEPCO System Unit on which SCR is installed under Section IX (Installing Additional Units on VEPCO System Units), either:
  - (1) Earlier than required by this Decree or other applicable law; or
  - (2) At time periods of the year not required by this Consent Decree or by applicable law; or
  - (3)At a 30-Day Rolling Average Emission Rate that is more stringent than required by this Decree.
- (C) VEPCO may trade in any federal or state program NO<sub>x</sub> emissions allowances which are generated from VEPCO's operating its SCRs, or equivalent control technology, at Mt. Storm Units 1, 2, and 3 as follows:
  - (1) 100% of NOx allowances generated earlier than required by this Decree or other applicable law; or
  - (2) 100% of NOx allowances generated at time periods of the year not required by this Consent Decree or by applicable law; or (3) 50% of NOx allowances generated by achieving a 30-Day Rolling Average Emission Rate more stringent than required by this Consent Decree. The remaining 50% of the NOx allowances generated may be used in accordance with Subparagraph A or be retired.

- 136. Netting Limits. Nothing in this Decree shall prevent VEPCO from claiming creditable contemporaneous emissions decreases from emission reductions effected by VEPCO prior to the June 30, 2001. For emission control actions taken by VEPCO to conform with the terms of this Consent Decree, including, but not limited to, improvements to ESPs and FGDs, installation of FGDs, installation of SCRs, and the fuel conversion of Possum Point Units 3 and 4, any emission reductions generated up to the level necessary to comply with the provisions of this Decree (and excluding simple control equipment operating requirements) shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Act's New Source Review program; provided, however, that nothing in this Decree shall be construed to prohibit VEPCO's seeking such treatment for decreases in emissions resulting from VEPCO's ceasing combustion of coal at Possum Point Unit 3 or Possum Point Unit 4, if:
  - (A) Such decreases are used in VEPCO's demonstrating whether the conversion of Possum Point Units 3 and 4 (plus the installation of up to two new units 540 MW (nominal) each, combined cycle electric generating units at Possum Point) would result in a net significant emissions increase; and
  - (B) VEPCO either (i) installs and continuously operates LAER on Possum Point
    Units 3 or 4 or (ii) demonstrates that the use of natural gas will result in a net emissions
    decrease; and
  - (C) VEPCO also complies with the NOx emissions cap and other requirements in Paragraph 96 for Possum Point Units 3 and 4 under this Decree and also installs SCR controls for NO<sub>x</sub> on the new combined cycle unit(s).

#### XIX. PERIODIC REPORTING

- 137. Compliance Report. After entry of this Decree, VEPCO shall submit to Plaintiffs a periodic report, in compliance with Appendix B, within sixty (60) days after the end of each half of the calendar year (January through June and July through December).
- Deviations Report. In addition to the reports required by the previous paragraph, if VEPCO violates or deviates from any provision of this Consent Decree, VEPCO shall submit to Plaintiffs a report on the violation or deviation within ten (10) business days after VEPCO knew or should have known of the event. In the report, VEPCO shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by VEPCO to cure the reported violation or deviation or to prevent such violation or deviations in the future. If at any time, the provisions of the Decree are included in Title V Permits, consistent with the requirements for such inclusion in the Decree, then the deviation reports required under applicable Title V regulations shall be deemed to satisfy all the requirements of this Paragraph.
- 139. VEPCO's reports (Periodic and Deviations) shall be signed by VEPCO's Vice President of Fossil and Hydro, or, in his or her absence, VEPCO's Vice President of Technical Services, or higher ranking official, and shall contain the following certification:

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

140. If any allowances are surrendered to any third party pursuant to Section VI the third

party's certification shall be signed by a managing officer of the third party's and shall contain the following language:

I certify under penalty of law that \_\_\_\_\_ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

#### XX. CIVIL PENALTY

141. Within thirty (30) calendar days of entry of this Consent Decree, VEPCO shall pay to the United States a civil penalty of \$5.3 million. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number 2003V00487 and DOJ Case Number 90-5-2-1-07122 and the civil action case name and case number of this action. The costs of EFT shall be VEPCO's responsibility. Payment shall be made in accordance with instructions provided by the Financial Litigation Unit of the U.S. Attorney's Office for the Eastern District of Virginia, Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. VEPCO shall provide notice of payment, referencing the USAO File Number, DOJ Case Number 90-5-2-1-07122, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Section XXIX, Paragraph 187 ("Notice"). Failure to timely pay the civil penalty shall subject VEPCO to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render VEPCO liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

#### XXI. MITIGATION PROJECTS

- 142. General. VEPCO shall submit for review and approval plans for the completion of the Mitigation Projects described in this Section, complying with the schedules and other terms of this Consent Decree and plans for such Projects approved under this Decree. In performing these Projects, VEPCO shall spend no less than \$13.9 million Project Dollars. VEPCO shall make available the full amount of the Project Dollars required by this Paragraph within one year of entry of this Decree. VEPCO shall maintain for review by the Plaintiffs, upon request, all documents identifying Project Dollars spent by VEPCO. All plans and reports prepared by VEPCO or by other persons pursuant to the requirements of this Section of the Consent Decree shall be publicly available from VEPCO, without charge. No Project Dollars may be made available or expended to undertake an obligation already required by law.
- 143. Good Faith. VEPCO shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Decree.
- 144. Other Project Requirements. In addition to the requirements imposed for each Project specified in this Decree, including Appendix C and the approved plans, the following requirements shall apply. If VEPCO elects (where such election is allowed) to undertake a Project by contributing funds to another person or instrumentality to carry out the Project, that person or instrumentality must, in writing: (A) identify its legal authority for accepting such funding, and (B) identify its legal authority to conduct the Project for which VEPCO contributes the funds. Regardless of whether VEPCO elects (where such election is allowed) to undertake

the Project itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, VEPCO acknowledges that it shall receive credit for expenditure of such funds as Project Dollars only in accordance with the approved plans. Provided however, that when VEPCO elects to undertake a Project by providing funds to a State or any instrumentality thereof, VEPCO shall receive credit for any timely expenditure of funds upon transfer of such funds to such State or instrumentality thereof, as long as the VEPCO provides payment in accordance with Appendix C and the approved plan. VEPCO shall certify, as part of the proposed plan submitted to the Plaintiffs for any contemplated Project, that no person is required by any law, other than this Consent Decree, to perform the Project described in the proposed plan. Within sixty (60) days following the completion of each approved Project, VEPCO shall submit to the Plaintiffs a report that documents the date that all aspects of the project were implemented, VEPCO's results in completing the project, including the emission reductions or other environmental or health benefits achieved, and the Project Dollars expended by VEPCO in implementing the Project. Based on consideration of these reports and the approved plans, and any other available, relevant information, the United States (after consultation with the other Plaintiffs) will advise VEPCO whether the Project has met the requirements of the Decree. VEPCO shall submit the required plans for, and complete, each Project, as approved by the United States, and by any other Plaintiff within whose territory a Project would be implemented, all as specified further in Appendix C to this Decree.

- XXII. STIPULATED PENALTIES & ALLOWANCE OR CREDIT SURRENDERS

  145. Within thirty (30) days after written demand from the United States, and subject to the provisions of Sections XXVI ("Force Majeure") and XXVII ("Dispute Resolution"), VEPCO shall pay the following stipulated penalties to the United States (and surrender the specified number of emission allowances or credits) for each failure by VEPCO to comply with the terms of this Consent Decree, as follows.
- Rolling Average or shorter averaging period imposed on NO<sub>x</sub>, SO<sub>2</sub>, and PM under Sections IV, V, VII, VIII ("Possum Point"), and IX ("Installing Additional Controls on VEPCO System Units"):
  - (A) less than 5% in excess of the limit: \$2,500 per day per violation;
  - (B) equal to or greater than 5% in excess of the limit: \$5,000 per day per violation;
  - (C) equal to or greater than 10% in excess of the limit: \$10,000 per day per violation.
  - (D) For failure to meet any VEPCO System-Wide emissions requirement (Paragraph 59(A) and (B) "VEPCO System: Interim Control of NOX Emissions: 2004 through 2007; Paragraph 60"VEPCO System NOX Limits 2003 and thereafter: Declining, System-Wide Tonnage Caps; and Paragraph 61 VEPCO System -Wide, Annual Average NOX Emission Rate): \$5,000 per ton for the first 100 tons resulting from the violation, and \$10,000 per ton for each additional ton resulting from the violation.

#### 147. Other Specific Failures. For failure to:

- (A) <u>install timely and commence operation timely of SCR</u> on each Unit (each SCR installation) specified in Section IV, Paragraph 56 ("Unit-Specific SCR Installations and Annual Performance Requirements"): (i) \$10.000 per day, per violation, for the first 30 days; and (ii) \$27,500 per day, per violation, thereafter.
- (B) complete any FGD improvements or installation needed to meet emission limits imposed under Section V, Paragraph 64 ("Construction, Upgrading, and Removal Efficiencies Required or on FGDs Serving Clover Units 1 and 2, Mount Storm Unites 1, 2, and 3, and Chesterfield Units 5 and 6"): (i) \$ 10,000 per day, per violation, for the first 30 days; and (ii) \$20,000 per day, per violation, thereafter.
- (C) <u>surrender timely the annually-required 45,000 SO<sub>2</sub> Allowances surrender</u> <u>under Section VI</u>: \$27,500 per day, per violation plus the surrender 100 additional SO<sub>2</sub> Allowances per day per violation.
- (D) timely transfer the annually-required surrender of 45,000 SO<sub>2</sub> Allowances by VEPCO to any third party under Section VI: \$27,500 per day, per violation plus the surrender 100 additional SO<sub>2</sub> Allowances per day per violation.
- (E) comply with any requirement in this Consent Decree regarding the use of any SO<sub>2</sub> or NO<sub>x</sub> allowances or credits: surrender three times the allowances or credits handled in violation of the requirement.
- (F) complete timely the proper installation of all equipment called for under

  Section VII (PM Emission Reductions and Controls) or under any plan or

- submission approved by EPA under Section VII: (i) \$ 10,000 per day, per violation, for the first 30 days; and (ii) \$20,000 per day, per violation, thereafter.
- (G) conduct a required stack test of PM emissions on each VEPCO System Unit where such test is required under Section VII: \$1,000 per day, per violation.
- (H) Submit timely and complete reports called for under Section XIX ("Periodic Reporting"): \$1,000 per day, per violation.
- (I) Complete any funding for any of the Projects described in Section XXI

  (Mitigation Projects): \$1,000 per day, per violation for the first 30 days; and
  \$5,000 per day, per violation thereafter.
- 148. Violations of any limit based on a 30-Day Rolling Average constitutes thirty (30) days of violation but where such a violation (for the same pollutant and from the same Unit or source) recurs within periods less than thirty (30) days, VEPCO shall not be obligated to pay a daily stipulated penalty, for any day of the recurrence for which a stipulated penalty has already been paid.

#### XXIV. ACCESS, AND INFORMATION COLLECTION AND RETENTION

149. Access, Inspection, Investigation. Any authorized representative of EPA, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the VEPCO System at any reasonable time and for any reasonable purpose regarding monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and inspecting and copying all records maintained by VEPCO required by this Consent Decree. VEPCO shall retain such records for a period of fifteen (15)

years from the date of entry of this Consent Decree. Nothing in this Consent Decree shall limit any information-gathering or inspection authority of EPA under the Act, including but not limited to Section 114 of the Act, 42 U.S.C. Section 7414.

#### XXV. COORDINATION OF ENFORCEMENT & DISPUTE RESOLUTION

- 150. <u>United States Enforcement and Dispute Resolution</u>. The United States may enforce any and all requirements of this Decree and may invoke dispute resolution provisions of this Decree as to any requirement of this Decree to which dispute resolution applies and also may participate in adjudication of any claim of Force Majeure made by VEPCO or any other Party.
- 151. <u>VEPCO Dispute Resolution</u>. VEPCO may invoke the dispute resolution provisions of this Decree over any requirement of this Decree to which dispute resolution applies.
- 152. <u>States Enforcement</u>. Consistent with Section XXV, The State of New York, New Jersey, or Connecticut, or any combination of them, may enforce only the following requirements of this Decree:
  - (A) those requirements imposed directly on a Unit at Mount Storm, Chesterfield, and Possum Point;
  - (B) any or all of the following VEPCO System-Wide requirements: Section IV

    Paragraph 59 ("Interim NO<sub>x</sub> Emissions for VEPCO System"), Paragraph 60

    ("VEPCO System NO<sub>x</sub> Declining Tonnage Caps") and Paragraph 61 ("NO<sub>x</sub>

    System-Wide Average Emission Rate"] and Section VI, Paragraph 71 (Annual Surrender of SO<sub>2</sub> Allowances); and
  - (C) those requirements involving timely and proper performance of Decreemandated mitigation projects (Section XXI and Appendix C).

- 153. The Commonwealth of Virginia and the State of West Virginia may enforce all of the requirements of this Decree applicable to VEPCO units within their respective jurisdictions, including the system-wide cap.
- 154. States Dispute Resolution. The States of New York, New Jersey, Connecticut. Virginia, or West Virginia, or any combination of them, may invoke dispute resolution only over those Decree requirements that such State could enforce under this Decree and may participate as a plaintiff in any matter in which VEPCO asserts Force Majeure under this Decree only if the matter concerns a requirement which such State could have enforced under the terms of this Decree. Notwithstanding the preceding sentence, the States of New York, New Jersey, Connecticut, Virginia, or West Virginia, or any combination of them, may participate as a plaintiff in any matter in which VEPCO asserts force majeure under this Decree, to the extent that resolution of the legal issue(s) at stake in that matter would affect the ability of New York, New Jersey, Connecticut, Virginia, or West Virginia to enforce any of the requirements specified in Paragraphs 152 and 153\_of this Section.
- York, New Jersey, Connecticut shall consult prior to enforcing a requirement under this Decree or prior to invoking Dispute Resolution (Section) for any issue, which the given State could enforce under this Decree. Absent exigent circumstances, the United States, Virginia, and West Virginia shall consult prior to enforcing a requirement under this Decree or prior to invoking Dispute Resolution (Section XXVII) for any issue which the given State could enforce under this Decree. If such consultation reveals that, for any reason, the United States does not intend to

participate, in the first instance, in either the Decree enforcement or invocation of Dispute
Resolution contemplated by New York, New Jersey, or Connecticut, Virginia, or West Virginia
then the consultation required by this Section is not satisfied until after "Senior Management
Level Officials" of United States consult with the "Senior Management Level Officials" of each
Plaintiff intending to enforce a requirement under the Decree or to invoke dispute resolution
under it. The United States shall undertake such consultation and shall complete it within
twenty-eight (28) days after the consultation with the States and the United States demonstrates
that the United States does not intend to participate in the activity contemplated by one or more
of the States. Only for purposes of the consultation requirement of this Section, "Senior
Management Level Official" means:

- (A) For the United States: Director of the Office of Regulatory Enforcement, U.S. EPA

  Office of Enforcement and Compliance Assurance, and Chief of the Environmental

  Enforcement Section, U.S. DOJ Environment & Natural Resources Division;
- (B) For New York: Chief of the Environmental Protection Bureau, Office of the Attorney General of the State of New York;
- (C) For New Jersey: Assistant Attorney General in Charge of Environmental Protection,

  Office of the Attorney General of the State of New Jersey;
- (D) For Connecticut: Director of the Environmental Department, Office of the Attorney General for the State of Connecticut;
- (E) For Virginia: Director of the Environmental Unit, Special Prosecutions Section,
  Public Safety and Law Enforcement Division, Office of the Attorney General of the
  Commonwealth of Virginia; and

- (F) For West Virginia: Director of the Division of Air Quality, West Virginia
  Department of Environmental Protection
- 156. Confirmation of Consultation. Contemporaneous with any filing to enforce the Decree or to invoke Dispute Resolution (Section XXVII), the moving Plaintiff shall serve on VEPCO a written statement noting that the consultation required by this Section has been completed, unless Plaintiff is relying on the "exigent circumstances" exception of this Section. If a Plaintiff invokes the "exigent circumstances" exception in lieu of completing this consultation process, that Plaintiff must then serve on VEPCO an explanation of the need for acting in advance of completing such consultation. "Exigent" is intended to have its normal meaning when used in this Section of the Decree, and reliance by a Plaintiff on this exception is subject to review by the Court.

#### XXVI. FORCE MAJEURE

157. General. If any event occurs which causes or may cause a delay in complying with any provision of this Consent Decree or causes VEPCO to be in violation of any provision of this Decree, VEPCO shall notify the Plaintiffs in writing as soon as practicable, but in no event later than ten (10) business days following the date VEPCO first knew, or within ten (10) business days following the date VEPCO should have known by the exercise of due diligence, that the event caused or may cause such delay or violation, whichever is earlier. In this notice, VEPCO shall reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay or violation may persist, the cause or causes of the delay or violation, the measures taken or to be taken by VEPCO to prevent or minimize the delay or violation, and the schedule by which those measures will be implemented. VEPCO shall

adopt all reasonable measures to avoid or minimize such delays and prevent such violations.

- 158. Failure of Notice. Failure by VEPCO to comply with the notice requirements of this Section shall render this Section voidable by the Plaintiffs authorized under Sections XXV (Coordination of Enforcement and Dispute Resolution) to enforce a Consent Decree requirement against which VEPCO could interpose the force majeure assertion in question. If voided, the provisions of this Section shall have no effect as to the particular event involved.
- Plaintiffs' Response. The Plaintiffs authorized under Sections XXV (Coordination of Enforcement and Dispute Resolution) to enforce a Consent Decree requirement against which VEPCO could interpose the force majeure assertion in question shall notify VEPCO, in writing, regarding VEPCO's claim of a delay in performance or violation within fifteen (15) business days after completion of procedures specified in Section XXV ("Enforcement Coordination"). If the Plaintiffs agree that the delay in performance or the violation has been or will be caused by circumstances beyond the control of VEPCO, including any entity controlled by VEPCO, and that VEPCO could not have prevented the delay through the exercise of due diligence, the parties shall stipulate to such relief as appropriate, which shall usually be an extension of the required deadline(s) for every requirement affected by the delay for a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to this Consent Decree in order to be effective. VEPCO shall not be liable for stipulated penalties for the period of any such delay.
- 160. <u>Disagreement</u>. If the Plaintiffs authorized under Sections XXV (Coordination of Enforcement and Dispute Resolution) to enforce a Consent Decree requirement against which VEPCO could interpose the force majeure assertion in question, do not accept VEPCO's claim

that a delay or violation has been or will be caused by a Force Majeure event, or do not accept VEPCO's proposed remedy, to avoid the imposition of stipulated penalties VEPCO must submit the matter to this Court for resolution by filing a petition for determination. Once VEPCO has submitted the matter, the United States, and other Plaintiffs as provided in Paragraph 159, shall have fifteen (15) business days to file a response(s). If VEPCO submits the matter to this Court for resolution, and the Court determines that the delay in performance or violation has been or will be caused by circumstances beyond the control of VEPCO, including any entity controlled by VEPCO, and that VEPCO could not have prevented the delay or violation by the exercise of due diligence, VEPCO shall be excused as to that event(s) and delay (including stipulated penalties otherwise applicable), but only for the period of time equivalent to the delay caused by such circumstances.

- 161. Burden of Proof. VEPCO shall bear the burden of proving that any delay in performance or violation of any requirement of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that VEPCO could not have prevented the delay by the exercise of due diligence. VEPCO shall also bear the burden of proving the duration and extent of any delay(s) or violation(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 162. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of VEPCO's obligations under this Consent Decree shall not constitute circumstances beyond the control of VEPCO or serve as a basis for an extension of time under this Section. However, failure of a permitting authority to issue a necessary permit in a timely

fashion may constitute a Force Majeure event where the failure of the permitting authority to act is beyond the control of VEPCO, and VEPCO has taken all steps available to it to obtain the necessary permit, including, but not limited to, submitting a complete permit application, responding to requests for additional information by the permitting authority in a timely fashion, accepting lawful permit terms and conditions, and prosecuting appeals of any allegedly unlawful terms and conditions imposed by the permitting authority in an expeditious fashion.

- 163. Potential Force Majeure Events. The parties agree that, depending upon the circumstances related to an event and VEPCO's response to such circumstances, the kinds of events listed below could qualify as Force Majeure events: construction, labor, or equipment delays; acts of God; Malfunction for PM as malfunction is defined in 40 C.F.R. 60.2; and orders by governmental officials, acting under and authorized by applicable law, that direct VEPCO to supply electricity in response to a legally declared, system-wide (or state-wide) emergency.
- 164. <u>Prohibited Inferences</u>. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to any party as a result of VEPCO delivering a notice pursuant to this Section or the parties' inability to reach agreement on a dispute under this Part.
- Extended Schedule. As part of the resolution of any matter submitted to this Court under this Section, the Parties by agreement with approval from this Court, or this Court by order, may, as allowed by law, extend the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or violation. VEPCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended schedule.

#### XXVII. DISPUTE RESOLUTION

- 167. Scope of Disputes Covered and Eligibility of Parties to Participate. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, except as provided in Section XXVI ("Force Majeure") or in this Section, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Parties. Invocation and participation of this Section also shall be done in compliance with Section XXV ("Coordination of Enforcement and Dispute Resolution").
- 168. <u>Invocation of Procedure</u>. The dispute resolution procedure required herein shall be invoked by one Party to this Consent Decree giving written notice to another advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 169. <u>Informal Phase</u>. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the Parties' representatives unless they agree to shorten or extend this period.
- 170. Formal Phase. If the Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs, shall provide VEPCO with a written summary of their position regarding the dispute. The written position provided by the Plaintiffs shall be considered binding unless, within thirty (30) calendar days thereafter, VEPCO files with this Court a petition that

describes the nature of the dispute and seeks resolution. The Plaintiffs may respond to the petition within forty-five (45) calendar days of filing. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section may be shortened upon successful motion of one of the parties to the dispute.

- 171. <u>Prohibited Inference</u>. This Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Section or the parties' inability to reach agreement.
- 172. Alteration of Schedule. As part of the resolution of any dispute under this Section, in appropriate circumstances the parties may agree, or this Court may order if warranted by law, an extension or modification of the schedule for completion of work under this Consent Decree to account for the delay that occurred as a result of dispute resolution. VEPCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.
- Applicable Standard of Law. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes; provided, however, that the parties reserve their rights to argue for what the applicable standard of law should be for resolving any particular dispute. Notwithstanding the preceding sentence of this Paragraph, as to disputes involving the submittal for review and approval under Section VII, the Court shall sustain the position of the United States as to disputes involving PM CEMs, any Pollution Control Upgrade Analysis, and optimization measures for PM that should be undertaken unless VEPCO demonstrates that the position of the United States is arbitrary or capricious.

#### XXVIII. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 174. Joint and Several Liability By Transfer of Certain VEPCO Property. If VEPCO proposes to sell or transfer any of its real property or operations subject to this Consent Decree, VEPCO shall advise the purchaser or transferee in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XXIX, Paragraph 187 ("Notices") at least sixty (60) days before such proposed sale or transfer. Before closing such purchase or transfer, a modification of this Consent Decree shall make the purchaser or transferee a party defendant to this Decree and jointly and severally liable with VEPCO for all the requirements of this Decree that may be applicable to the transferred or purchased property or operations, including joint and several liability with VEPCO for all Unit-specific requirements and all VEPCO System-Wide requirements, namely: VEPCO System-Wide Annual Average Emission Rate for NO<sub>x</sub> (Section IV), SO<sub>2</sub> Allowance surrenders (Section VI), and VEPCO System NO<sub>x</sub> annual tonnage caps (Section IV).
- Option for Alternative Request on System-Wide obligations. VEPCO may propose and the United States may agree to restrict the scope of joint and several liability of any purchaser or transferee for any VEPCO System-Wide obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section X ("Permits").
- 176. Option for Alternative Request on Particular VEPCO System Units. VEPCO also may propose, and the United States may agree to execute, a modification that transfers responsibility for completing Decree-required capital improvements from VEPCO to the

purchaser of property at which the capital improvement is required.

- 177. <u>Standard for Reviewing a VEPCO Request</u>. Liability transfers sought by VEPCO under this Section of the Decree shall be granted by the United States (or by all the Plaintiffs, as applicable) if the relevant Plaintiffs agree that:
  - (A) The purchaser or transferee has appropriately contracted with VEPCO to assume the obligations and liabilities applicable to the Unit; and
  - (B) VEPCO and the purchaser or transferee have properly allocated any emission allowance, credit requirement, or other Decree-imposed obligation on the VEPCO System, which also implicates the Unit to be transferred.

In the case of transfers of VEPCO System Units at Chesterfield and/or Mount Storm, VEPCO's scope of liability for either VEPCO System-Wide requirements or for Decree-required capital improvement on Units at those plants shall not be transferred unless the States of New York, New Jersey, and Connecticut concur with the United States' determination to accept liability of only the purchaser or transferee, as opposed to joint and several liability between VEPCO and the purchaser.

No limit on contractual allocation of responsibility that does not affect rights of the Plaintiffs. This Section of the Decree shall not be construed to impede VEPCO and any purchaser or transferee of real property or operations subject to this Decree from contractually allocating as between themselves the burdens of compliance with this Decree, provided that both VEPCO and such purchaser or transferee shall remain jointly and severally liable to the Plaintiffs for those obligations of the Decree specified above, absent approval under this Section of a VEPCO request to allocate liability.

#### XXIX. GENERAL PROVISIONS

- 179. <u>Effect of Settlement</u>. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with all applicable Federal, State, or Local laws or regulations.
- 180. <u>Criminal Liability</u>. This Consent Decree does not apply to any claim(s) of alleged criminal liability, which are reserved, nor to any claims resolved and then reopened under the terms of this Decree.
- Limitation on Procedural Bars to Other Claims. In any subsequent administrative or judicial action initiated by Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, VEPCO shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim splitting, or other defense based upon any contention that the claims raised by the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Sections XI through XVII (Resolution of Certain Civil Claims).
- Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve VEPCO of its obligation to comply with all applicable Federal, State, and Local laws and regulations. Subject to Sections XI through XVII, nothing contained in this Consent Decree shall be construed to prevent or limit the Plaintiffs' rights to obtain penalties or injunctive relief under the Clean Air Act or other federal, state, or local statutes or

regulations.

- 183. Third Parties. This Consent Decree does not limit, enlarge, or affect the rights of any party to this Consent Decree as against any third parties.
- 184. Costs. Each party to this action shall bear its own costs and attorneys' fees.
- 185. <u>Public Documents</u>. All information and documents submitted by VEPCO to the United States or the other Plaintiffs under this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential, under applicable law. VEPCO may not seek such protection concerning submittals required by the Decree that concern mitigation projects (Section XXI).
- Public Comment. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the policy statement reproduced at Title 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate.
- Notice. Unless otherwise provided herein, notifications to or communications with the Plaintiffs or VEPCO shall be deemed submitted on the date they are postmarked and sent either by overnight mail, return receipt requested, or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the Plaintiffs or VEPCO is required by the terms of this Consent Decree, it shall be addressed as follows:

#### For the United States of America:

Chief
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
DJ# 90-5-2-1-07122

- and -

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

- and -

Regional Administrator U.S. EPA Region III 1650 Arch Street Philadelphia, PA 19106

# For Commonwealth of Virginia:

Director Virginia Department of Environmental Quality 629 East Main Street P.O. Box 10009 Richmond, VA 23240-0009

# For State of West Virginia:

Director, Division of Air Quality
Department of Environmental Protection
7012 MacCorkle Avenue SE
Charleston, WV 25304

# For State of New York:

Bureau Chief Environmental Protection Bureau New York Attorney General's Office 120 Broadway New York, New York 10271

#### For State of New Jersey:

Administrator
Air and Environmental Quality Compliance and Enforcement
P.O. Box 422
401 East State Street, Floor 4
Trenton, NJ 08625

– and –

Section Chief Environmental Enforcement Division of Law P.O. Box 093 25 Market Street, 7th Floor Trenton, NJ 08625

# For State of Connecticut:

Department Head Environmental Protection Department Connecticut Attoreny General's Office 55 Elm Street Hartford, CT 06106

#### For VEPCO:

Senior Vice President – Fossil and Hydro Dominion Energy – Dominion Generation 5000 Dominion Boulevard Glenn Allen, VA 23060

Any Party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

- 188. <u>Procedure for Modification</u>. There shall be no modification of this Decree unless such modification is in writing, is filed with the Court, and either:
  - (a) bears the written approval of all of the Parties and is approved by the Court, or
  - (b) is otherwise allowed by applicable law.

- Ontinuing Jurisdiction. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.
- Complete Agreement. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the parties with respect to the settlement embodied in this Consent Decree. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree, including Appendices A ("Coal-Fired Steam-Electric Generating Units Constituting the VEPCO System"), B ("Consent Decree Reporting Form"), and C ("Mitigation Projects that Shall be Completed Under this VEPCO Consent Decree"). Appendices A through C are incorporated into and part of this Consent Decree
- Non-Severability Absent Re-Adoption by the Parties. If this Consent Decree, in whole or in part, is held invalid by a court vested with jurisdiction to make such a ruling, and if such ruling becomes a final judgment, then after entry of such final judgment, no Party shall be bound to any undertaking that would come due or have continued under this Decree after the date of that final judgment, and the Decree shall be void from the entry of such final judgment. At any time, upon consent of all the Parties, the Parties may preserve that portion of this Decree not held invalid by agreeing, in a writing submitted to this Court, to keep in force that portion of this Decree not held invalid.
- 192. <u>Citations to Law.</u> Except as expressly provided otherwise by this Decree,

provisions of law expressly cited by this Decree shall be construed to mean the provision cited as it is defined under law.

- Meaning of Terms. Every term expressly defined by this Decree shall have the meaning given to that term by this Decree, and every other term used in this Decree that is a term used under the Act or the regulations implementing the Act shall mean in this Decree what such term means under the Act or those regulations.
- Calculating and Measuring Performance. Performance standards, emissions limits, and other quantitative standards set by or under this Decree must be met to the number of significant digits in which the standard or limit is expressed. Thus, for example, an Emissions Rate of 0.090 is not met if the actual Emissions Rate is 0.091. VEPCO shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the second significant digit, depending upon whether the limit is expressed to two or three significant digits. Thus, for example, if an actual Emissions Rate is 0.0904, that shall be reported as 0.090, and shall be in compliance with an Emissions Rate of 0.090, and if an actual Emissions Rate is 0.0905, that shall be reported as 0.091, and shall not be in compliance with an Emissions Rate of 0.090. VEPCO shall collect and report data to the number of significant digits in which the standard or limit is expressed. As otherwise applicable and unless this Decree expressly directs otherwise, the calculation and measurement procedures established under 40 C.F.R. Parts 75 and 76 apply to the measurement and calculation of NO<sub>x</sub> and SO<sub>2</sub> under this Decree.
- 195. <u>Independent Requirements</u>. Each limit and / or other requirement established by or under this Decree is a separate, independent requirement.
- 196. Written Statements to be Sent to all Plaintiffs. Notwithstanding any other

provision of this Decree, VEPCO shall supply to all Parties to this Decree all notices, reports, applications, elections, and any other written statement that the Decree requires VEPCO to supply to any Party to the Decree.

Applicable Law on Data Use Still Applies. Nothing in this Consent Decree alters or waives any applicable law (including, but not limited to, any defenses, entitlements, or clarifications related to the Credible Evidence Rule (62 Fed. Reg. 8314, Feb. 27, 1997)) concerning use of data for any purpose under the Act, generated by the reference methods specified herein or otherwise.

# XXX. CONDITIONAL TERMINATION OF ENFORCEMENT, CONTINUATION OF TERMS, AND FIRST RESORT TO TITLE V PERMIT

- 198. <u>Termination as to Completed Tasks</u>. As soon as VEPCO completes any element of construction required by this Decree or completes any requirement that will not recur, VEPCO may seek termination of that portion of the Decree that dictated such requirement.
- 199. <u>Conditional Termination of Enforcement through Consent Decree.</u> Once VEPCO:
  - (A) believes it has successfully completed and commenced successful operation of all pollution controls (new and upgrades) required by Decree;
  - (B) holds final, Title V Permits -- covering all Units in the VEPCO System -- that include as enforceable permit terms all of the performance and other requirements for the VEPCO System as required by Section X ("Permits"), and
  - (C) certifies that the date is later than December 31, 2015;

then VEPCO may file a notice with the Court of these facts. Unless within forty-five

(45) days after VEPCO files such a notice, any Plaintiff objects to the accuracy of that notice, enforcement based on Decree violations that occurred after the filing of the notice shall be through the applicable Title V Permit and not through this Decree.

200. Resort to Enforcement under this Consent Decree. Notwithstanding paragraph 199, if enforcement of a provision of this Decree cannot be pursued by a party under the applicable Title V permit, or if a Decree requirement was intended to be part of the Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Decree at any time.

SO ORDERED, THIS 3 DAY OF October, 2003

90

# FOR THE UNITED STATES OF AMERICA:

THOMAS L. SANSONETT

Assistant Attorney General

Environmental and Natural Resources Division United States Department of Justice

THOMAS A. MARIANI

Assistant Chief

**Environmental Enforcement Section** 

Environmental and Natural Resources Division

United States Department of Justice

JOHN PETER SUAREZ

Assistant Administrator

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Bruce C. Buckheit BRUCE C. BUCKHEIT

Director, Air Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

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DONALD S. WELSH Regional Administrator

Region 3

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# FOR THE STATE OF NEW YORK

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# FOR VIRGINIA ELECTRIC AND POWER COMPANY:

EDWARD RIVAS

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Virginia Electric and Power Company

# APPENDIX A TO "VEPCO" CONSENT DECREE THE UNITS COMPRISING THE "VEPCO SYSTEM" IN UNITED STATES, ET AL. V. VIRGINIA ELECTRIC AND POWER CO.

Steam Electric Generating Unit: Plant Name, Unit Number, Unit Abbreviation, & Nominal Nameplate ("MW")	Improved Unit for SO <sub>2</sub> Under Decree Paragraph 64	Improved Unit for NO <sub>x</sub> Under Decree Paragraph 56	Optimization for PM Required under Decree Section VII
Bremo Unit 3 ("BR 3") 69 MW	NO	NO	YES
Bremo Unit 4 ("BR 4") 185 MW	NO	NO	YES
Chesapeake Unit 1 ("CEC 1") 112 MW	NO	NO	YES
Chesapeake Unit 2 ("CEC 2") 112 MW	NO	NO	YES
Chesapeake Unit 3 ("CEC 3") 185 MW	NO	YES	YES
Chesapeake Unit 4 ("CEC 4") 239 MW	NO	YES	YES
Clover Unit 1 ("CL 1") 393 MW	YES	NO	YES
Clover Unit 2 ("CL 2") 393 MW	YES	NO	YES
Chesterfield Unit 3 ("CH 3") 112 MW	NO	NO	YES
Chesterfield Unit 4 ("CH 4") 187 MW	NO	YES	YES
Chesterfield Unit 5 ("CH 5") 359 MW	YES	YES	YES
Chesterfield Unit 6 ("CH 6") 694 MW	YES	YES	YES

APPENDIX A (continued)					
Steam Electric Generating Unit: Plant Name, Unit Number, Unit Abbreviation, & Nominal Nameplate ("MW")	Improved Unit for SO <sub>2</sub> Under Decree Paragraph 64	Improved Unit for NO <sub>x</sub> Under Decree Paragraph 56	Optimization for PM Required under Decree Section VII		
Mt. Storm Unit 1 ("MS 1") 551 MW	YES	YES	YES		
Mt. Storm Unit 2 ("MS 2") 551 MW	YES	YES	YES		
Mt. Storm Unit 3 ("MS 3") 552 MW	YES	YES	YES		
North Branch ("NB") 92 MW	NO	NO	YES		
Possum Point Unit 3 ("PP 3") 114 MW	YES	YES	NO		
Possum Point Unit 4 ("PP 4") 239 MW	YES	YES	NO		
Yorktown Unit 1 ("YT 1") 187 MW	NO	NO	YES		
Yorktown Unit 2 ("YT 2") 187 MW	NO	NO	YES		

# Appendix A: Coal Specifications for Sulfur

Unit	Fuel SO2 Specification (lbs SO2/mmBtu)	Fuel Sulfur Specification (lbs S/mmBtu)	Fuel Sulfur Specification (% by weight)
Bremo Unit 3	2.64		
Bremo Unit 4	2.64		
Chesapeake Unit	2.64		
Chesterfield Unit	2.64		
Chesterfield Unit	2.64		
Chesterfield Unit	2.64		
Chesterfield Unit	2.64		
Clover Unit 1	N/A		
Clover Unit 2	N/A		
Mt. Storm Unit 1		1.9	
Mt. Storm Unit 2		1.9	
Mt. Storm Unit 3		1.9	
North Branch			44
Possum Point	N/A		
Possum Point	N/A		
Yorktown Unit 1	2.64		
Yorktown Unit 2	2.64		

### APPENDIX B - REPORTING REQUIREMENTS

VEPCO shall submit its semi-annual report as required by Paragraph 137 electronically and in hard copy form. Each semi-annual report shall be certified as required by Paragraph 139 of this Consent Decree. The semi-annual report is in addition to all other notices and reporting obligations under the Consent Decree. VEPCO shall provide the following information in each of the required semi-annual reports:

# I. NO<sub>x</sub> Reporting Requirements

- A. Installation and Seasonal/Annual Operation of SCRs
  - 1. The progress of construction (such as, if construction is not underway, the construction schedule, dates of contract execution, major component delivery, and, if construction is underway, the estimated percent of installation and estimated construction completion date) and, once construction is complete, the date of final installation and of acceptance testing under the SCR contract, of SCR controls required under Paragraph 56 of the Consent Decree.
  - 2. Commencing when 30-Day Rolling Average Emission Rates become applicable, the 30-Day Rolling Average Emission Rate (lbs/mmBTU) as defined in Paragraph 5, for each operating day for each Unit utilizing SCRs required under Paragraph 56 of the Consent Decree.
  - 3. Within the first report that identifies a 30-Day Rolling Average Emission Rate (lbs/mmBTU) for each SCR, at least five (5) example calculations (including raw CEM data in electronic format for the calculation) used to determine the 30-Day Rolling Average Emission Rate. If at any time VEPCO changes any aspect within the methodology used in determining the 30-Day Rolling Average Emission Rate, VEPCO shall explain the change and the reason for using the new methodology.
  - 4. All instances, and explain events, that cause deviations from any 30-Day Rolling Average Emission Rate in lbs/mmBTU required in Paragraph 56. VEPCO shall identify any corrective actions taken in response to such deviation.
  - 5. A description of the how VEPCO met the SCR performance efforts required in Paragraph 57 (Best Efforts).

### B. Interim Control of NO<sub>x</sub> Emissions

1. In addition to the notice required under paragraph 59, within each semi-annual report covering activities in 2004 through 2007, identify the compliance option selected as between Paragraph 59(A) and 59(B) for that given year and

- the date that the notification required in Paragraph 59 was submitted to the Plaintiffs, if any such notification is required under Paragraph 59.
- 2. If VEPCO implements option (A) under Paragraph 59, report which Unit or Units will utilize year-round SCR control(s) and the amount of MW represented by the identified Units and report for each Unit controlled with year-round SCR the 30-Day Rolling Average Emission Rate (lbs/mmBTU) as defined in Paragraph 5 for each operating day.
- 3. If VEPCO implements option (B) under Paragraph 59, the Seasonal System-Wide Emission Rate (lbs/mmBTU) as defined in Paragraph 44, within the first report that identifies a Seasonal System Wide Emission Rate, provide at least five (5) example calculations (including raw CEM data in electronic format for the calculations) used to determine the Seasonal System Wide Emission Rate. If at any time VEPCO changes any aspect within the methodology used in determining the Seasonal System-Wide Emission Rate, VEPCO shall explain the change and the reason for using the new methodology.

# C. Annual NO<sub>x</sub> System-Wide Requirements

- 1. Within the last report for any given year for which a report is due, report the total NO<sub>x</sub> emissions from the VEPCO System, and for each VEPCO System Unit, for the calendar year covered by the report as tons per year.
- 2. Within the last report for any given year for which a report is due, commencing in 2013, report the System Wide Annual Emission Rate and the underlying calculation for the VEPCO System for the previous calendar year (starting with the year 2013) as lbs/mmBTU.

# D. Miscellaneous NO<sub>x</sub> Provisions

- 1. For each Unit in the "VEPCO System" that utilizes SCR control pursuant to a requirement of the Consent Decree, all NO<sub>x</sub> emissions (in tons) excluded from any NO<sub>x</sub> emission calculation, as permitted in Paragraph 5 and an explanation for excluding such emission, as specified in subparagraph 2, below. The requirement to report tons of emissions excluded, but no other provisions, shall expire on December 31, 2015.
- 2. Commencing when any VEPCO System Unit becomes subject to a 30-Day Rolling Average Emissions Rate for NO<sub>x</sub> and utilizes an SCR pursuant to a requirement of the Consent Decree, VEPCO shall report:
  - a. The date and time that the fire is extinguished;

- b. The date and time that the Unit is restarted and the date and time that the Unit is synchronized with an utility electric distribution system after the restart:
- c. The NO<sub>x</sub> emissions emitted by the Unit prior to the time that the Unit was synchronized with an utility electric distribution system;
- d. On the fifth and subsequent Cold Start Up Periods that occur within any 30-Day period, the earlier of the date and time that (1) is eight hours after the Unit is synchronized with a utility electric distribution system, or (2) the flue gas has reached the SCR operational temperature as specified by the catalyst manufacturer;
- e. The NO<sub>x</sub> emissions emitted during the fifth and subsequent Cold Start Up Periods;
- f. Identification of the date, time and duration of any period when emissions are excluded due to a malfunction of the SCR, as provided by Paragraph 5, and supporting information regarding the malfunction, the cause, and corrective actions taken, and the amount of NO<sub>x</sub> emissions during the malfunction.

#### E. Possum Point

The tons of NO<sub>x</sub> from Possum Point Units 3 and 4 rolled daily as determined by Paragraph 96.

### II. SO<sub>2</sub> Reporting Requirements

# A. SO<sub>2</sub> Removal Efficiency Requirements

- 1. The progress of construction and improvement (such as, if construction is not underway, the dates of contract execution, the estimated percent of installation, and major component delivery) and, once construction and improvement is complete, the date of final installation, improvement, and operation of FGDs required under Paragraph 64 of the Consent Decree, and of initial performance testing, if any.
- 2. Commencing when any 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub> becomes applicable for each FGD as defined in Paragraph 64, the 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub> for each operating day.
- 3. Within the first report that identifies a 30-Day Rolling Average Removal Efficiency for each FGD, at least five (5) example calculations (including raw CEM data in electronic format for the calculations) used to determine the 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub>. If at any time VEPCO

changes any aspect within the methodology used in determining the 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub>, VEPCO shall explain the change and the reason for using the new methodology.

## B. SO<sub>2</sub> Emission Rate

- 1. For Clover Units 1 & 2, Mt. Storm Units 1, 2, & 3 and Chesterfield Units 5 & 6 upon qualifying for a 30-Day Rolling Average Emission Rate as provided in Paragraph 66 of the Consent Decree, the 30-Day Rolling Average Emission Rate (lbs/mmBTU), as defined in Paragraph 5, for each operating day for each Unit qualifying for the SO<sub>2</sub> emission rate.
- 2. Within the first report that identifies a 30-Day Rolling Average Emission Rate for each FGD, at least five (5) example calculations (including raw CEM data in electronic format for the calculations) used to determine the 30-Day Rolling Average Emission Rate. If at any time VEPCO changes any aspect within the methodology used in determining the 30-Day Rolling Average Emission Rate, VEPCO shall explain the change and the reason for using the new methodology.
- 3. A description of the how VEPCO met the FGD performance efforts required in Paragraph 69 (Best Efforts).
- C FGD Bypass Days at Mt. Storm (Consent Decree Paragraph 67)
  - 1. For each FGD outage or FGD downtime at Mt. Storm Units 1, 2 or 3, as allowed under Paragraph 67, the following information:
    - a. The date and time the outage/downtime began;
    - b. The date and time that the FGD that was offline was returned to operation and the duration of the FGD outage/downtime;
    - c. A narrative explanation of corrective or maintenance actions taken by VEPCO;
    - d. The total SO<sub>2</sub> emitted from the Unit during the FGD outage/downtime;
    - e. The total amount of SO2 emission, in tons, that would have been emitted at the Unit during the FGD outage/downtime had VEPCO burned coal with the sulfur content required by the Consent Decree, during the FGD outage/downtime;
    - f. The amount of allowances to be surrendered and provide evidence that VEPCO surrendered to EPA the amount of SO<sub>2</sub> Allowances required to be surrendered under Paragraph 67;
    - g. Report that the Unit with the FGD outage/downtime was not dispatched ahead of the other Mount Storm Units or the Clover Power Station Units during the FGD outage/downtime and the dispatch order

- for each Unit of the VEPCO System during the FGD outage/downtime; and
- h. By Unit, a year-to-date tabulation of the number and duration of FGD outages/downtime at Mt. Storm Units 1, 2, & 3, and the total amount of FGD outage/downtime permitted by the Consent Decree for that year.

# D. Miscellaneous SO<sub>2</sub> Provisions

- 1. Commencing when any VEPCO System Unit becomes subject to a 30-Day Rolling Average Removal Efficiency or Emission Rate requirement for SO<sub>2</sub>, for each Unit in the "VEPCO System" that utilizes FGD control pursuant to a requirement of the Consent Decree, when a Unit is taken out of service and the fire in the boiler is extinguished during the reporting period:
  - a. The date and time that the fire is extinguished;
  - b. The date and time the Unit is restarted;
  - c. The date and time that the Unit is synchronized with an utility electric distribution system after the restart; and
  - d. SO<sub>2</sub> emissions emitted by the Unit prior to the time that the Unit was synchronized with a utility electric distribution system, ending on December 31, 2015.
- 2. Within the last report for any given year, report the total SO<sub>2</sub> emissions from the VEPCO System for the calendar year covered by the report as tons per year, and for each Unit in the VEPCO System, report the annual SO<sub>2</sub> emissions in tons per year for the calendar year covered by the report.

### E. Annual Surrender of SO<sub>2</sub> Allowances

- 1. Beginning in 2013, whether it made the annual SO<sub>2</sub> allowance surrender required by the Consent Decree to the U.S. EPA and shall provide documentation verifying this surrender.
- 2. If VEPCO surrenders the SO<sub>2</sub> allowances to a third party, the following information:
  - a. The identity of the third-party recipients(s) of the SO<sub>2</sub> allowances and a listing of the serial numbers of the transferred allowances;
  - b. A certification from the third-party recipient(s) that it (they) will not sell, trade or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any law.
  - c. Within 12 months after the first report of the transfer, VEPCO shall provide documentation that the third-party recipients(s) of the SO<sub>2</sub> allowances permanently surrendered the allowances to U.S. EPA

within one year after VEPCO transferred the allowances the third-party recipient(s).

- F. Super-compliance Trading of Allowances
  - 1. The amount of SO<sub>2</sub> Allowances and NO<sub>x</sub> emission allowances or credits used or traded pursuant to Paragraph 75 and Section XVIII and the calculations or data justifying the generation of the used or traded allowances or credits.

### III. PM Requirements

- A. Use of PM Controls Existing at the Time the Decree was Entered and PM Emissions Rate
  - 1. Until a Unit is subject to a PM emissions rate pursuant to this Consent Decree, the following information for each Unit:
    - a. The calendar days on which the ESP was not operating at any time that the Unit was in operation;
    - b. If, in accordance with Paragraphs 78 and 79, an ESP or portion thereof fails, does not perform in accordance with the equipment manufacturer's specifications or is shutdown by VEPCO, the calendar date of each such instance, the time that the failure or inadequate performance of the ESP began, all corrective actions undertaken by VEPCO and the calendar date and time that the ESP was restored to the mode of operation required by Paragraphs 78 and 79. VEPCO shall also report any additional corrective actions undertaken in response to the event.
  - 2. For each Unit in the VEPCO System at which a PM emission rate applies pursuant to this Consent Decree, the following information:
    - a. The PM Emission Rate (lbs/mmBTU) for the Unit, determined under the Consent Decree:
    - b. If, in accordance with Paragraphs 78 and 79, an ESP or portion thereof fails, or does not perform in accordance with the equipment manufacturer's specifications, the calendar date of each such instance, the time that the failure or sub-par performance of the ESP began, all corrective actions undertaken by VEPCO and the calendar date and time that the ESP was restored to the mode of operation required by Paragraphs 78 and 79. VEPCO shall also report any additional corrective actions undertaken in response to the event.

- 3. Information required to be reported within the approved PM optimization plans.
- 4. A description of the how VEPCO met the PM control device performance efforts required in Paragraph 78 (Best Efforts).

#### B. PM CEMs

- 1. For each PM CEM installed on a Unit in the VEPCO System:
  - a. If the PM CEM was installed during the reporting period, the date of installation of the PM CEM:
  - b. The dates that the PM CEM operated;
  - c. If the PM CEM did not operate continuously throughout the quarter without interruption whenever the Unit it serves was operating, the date and time that the PM CEM was not operating, a description of the cause of the PM CEM's outage, the steps taken by VEPCO to fix the PM CEM, any additional corrective actions undertaken by VEPCO in response to the event and the time and date that the PM CEM was returned to service.

# C. Performance Testing/Monitoring of PM Emission

- 1. For each Unit in the VEPCO System:
  - a. If the Unit was required to perform a stack test pursuant to the Consent Decree, the executive summary and results of the stack test;
  - b. If the Unit has a PM CEM, the three-hour average emission rate for PM emissions (or such longer period as is specified in any applicable PM emissions limitation requirement), in lb/mmBtu.

### IV. Deviation Reporting

- A. In addition to reporting under Paragraph 137, a summary of all deviations that occurred during the reporting period and the date that the deviation was initially reported under Paragraph 138.
- B. Within each deviation report submitted under Paragraph 138, the following information:
  - 1. The Consent Decree requirement under which the deviation occurred, with a reference to the Consent Decree paragraph containing the requirement;
  - 2. The date and time that the deviation occurred;

- 3. The date and time that the deviation was corrected;
- 4. The data, calculations or other information indicating that a deviation occurred; and
- 5. A narrative description of the cause or suspected cause of the deviation, the steps taken by VEPCO to correct the deviation and any additional corrective actions taken by VEPCO in response to the deviation.

# V. Mitigation Project Reporting

- A. The progress such as the schedule for completion of the project dates of contract execution, and estimated percent of completion of the Mitigation Projects required in Section XXI of the Consent Decree.
- B. The amount of Project Dollars expended on Mitigation Projects.

#### VI. VEPCO Submissions

A list all plans or submissions and the date submitted to the Plaintiffs for the reporting period, and identify if any are pending the review and approval of the Plaintiff.

# VII. VEPCO Capital Projects

A list of all Capital Expenditures performed throughout the VEPCO System on the Boiler Islands in order to determine meeting the threshold established in Paragraphs 111, 124, and 133.

### VIII. Additional Information

Provide a response to any reasonable request by the Plaintiffs for any additional information regarding these reporting requirements or the obligations and requirements of this Consent Decree.

### APPENDIX C - MITIGATION PROJECTS REQUIREMENTS

In compliance with and in addition to the requirements in Section XXI of the Consent Decree, VEPCO shall comply with the requirements of this Appendix to ensure that the benefits of the environmental mitigation protects are achieved. No Party may submit a proposed plan for a mitigation project until after entry of the Consent Decree.

- I. Clean Diesel, Idle Reduction and School Bus Retrofit Project To Be Conducted within the District of Columbia, Delaware, Maryland, Pennsylvania, Virginia and West Virginia and Resource Lands Project
  - A. Within 90 days after entry of the Consent Decree, VEPCO shall submit a plan to EPA for review and approval for the completion of the Clean Diesel, Idle Reduction and School Bus Retrofit Project in which VEPCO shall spend no less than \$2,500,000 Project Dollars to retrofit diesel engines with emission control equipment, replace diesel engines with cleaner engines, subsidize the use of clean diesel fuels or install equipment or implement strategies that will reduce engine idling in the above listed jurisdictions.
  - B. The plan shall satisfy the following criteria:
    - 1. Involve fleets located in geographically diverse areas and/or fleets operated in nonattainment areas or areas at significant risk of nonattainment status within the listed states, taking into account other clean diesel projects called for under this Decree.
    - 2. Provide for the retrofit of high emitting, in service heavy-duty diesel engines with verified emissions control equipment. Retrofit technology may include but not be limited to oxidation catalysts and particulate matter filters that will reduce particulate matter and hydrocarbon emissions.
    - 3. Provide for the replacement of engines with those that meet the 2007 engine standards and/or are equipped with verified emission control technology.
    - 4. Involve vehicles that are located in areas in which ultra low sulfur diesel fuel (ULSD) is already available or is scheduled to become available and where such fuel is required for retrofit technology. For affected municipalities, school districts or similar local government entities whose fleet will be retrofitted, the plan may provide for (a) the procurement of tanks or other infrastructure required enabling that fleet to obtain and use ULSD and (b) offsetting higher fuel costs from the requirement to use ULSD.
    - 5. Provide for the use of alternative diesel fuels that reduce emissions of particulate matter, nitrogen oxides and/or hydrocarbons including but not

limited to emulsions and biodiesel fuels.

- 6. Provide for the installation of verified idle reduction technology and/or idle reduction strategies that effectively reduce emissions from idling engines through equipment such as electrification stations and/or implementation of outreach and education programs to implement policies that reduce idling time.
- 7. Account for hardware and installation costs, and may provide also for incremental maintenance costs and/or costs of repairs on such hardware for a period of up to four years after installation.
- 8. Limit recipients of retrofits to fleets that legally bind themselves to maintain any equipment installed in connection with the project during and after completion of the project.
- 9. Establish minimum standards for any third-party with whom VEPCO might contact to carry out this program that include prior experience in arranging vehicle retrofits, ULSD purchases, anti-idling campaigns, etc. and a record of prior ability to interest and organize fleets, school districts, community groups, etc. to join a clean diesel program.
- 10. A schedule for completing each portion of the project.
- C. Within 180 days after entry of the Consent Plans, VEPCO shall submit a plan to EPA for review and approval for the identification, acquisition, restoration, management and/or preservation of resource lands to mitigate or compensate for lost service uses possibly resulting from past power plant emissions in which VEPCO shall spend no less than \$500,000. The proposed plan shall satisfy the following criteria:
  - 1. Provide a means for the identification of available resource lands which may be used to mitigate any past impacts of acid rain deposition or other possible effects of power plant emissions and assess the value of such lands in providing such benefits as contributing to carbon sequestration, restoring forest productivity and other relevant factors.
  - Establish a process for carrying out the plan, including the identification
    of resources, staff and/or other entities charged with project execution,
    management and oversight during the terms of the Decree, and develop a
    related schedule for completing each portion of the project.
  - 3. Within 180 days after approval of the proposed selection process identify particular plots of land that are consistent with the specifications outlined.
  - 4. Submit the identified plots of land with recommended selection criteria

within a reasonable period of time. Develop legal options for acquiring, restoring and assuring the continued preservation of identified lands.

D. Performance - Upon approval of plan by the United States, VEPCO shall complete the mitigation project according to the approved plan and schedule.

### II. Solar Photovoltaic (PV) Project - To Be Conducted in New York State

A. New York shall propose to VEPCO and the U.S. a plan using \$2.1 million to accomplish the installation of solar photovoltaics ("PVs") on municipal buildings in New York. These building would then use the PV-generated energy, in part to help remove some demand for energy from the electrical grid during peak demand periods. The project will be administered through the New York State Energy Research and Development Authority's (NYSERDA) Solar Photovoltaics program.

### B. New York's proposed plan must:

- 1. Describe how the work or project to be performed is consistent with requirements of Section II.A, above;
  - a) Include a general schedule and budget (for \$2.1 million) for completion of the work; including payment instructions for VEPCO's submission of funds to the State, along with a requirement of periodic reports to all Parties on the progress of the work called for in the proposed plan through completion of the project;
  - b) Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
  - c) Describe briefly how work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once a plan exists for this project or work and VEPCO has transferred at least \$2.1 million to New York to complete the project or work described in the plan. VEPCO shall transfer this sum as soon as possible after the proposed plan is developed but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date.
- D. If New York (or NSYERDA) is later unwilling or unable to perform the project specified here, then New York, in consultation with VEPCO, shall select an alternative project or projects designed to accomplish the same kinds of goals as intended for this project. After proceeding through this proposed plan process

for the alternative project, VEPCO shall fund such project or projects in the amount of \$2.1 million.

# III. Mitigating Harm to Health Related to Air Pollution in New Jersey and New York: Public Transit - Diesel Bus Catalyzed Particulate Filters

A. New Jersey shall supply to VEPCO and the U.S. a plan to use \$2.7 million to accomplish the installation of catalyzed particulate filters (CPFs) on late-model conventional diesel buses used to transport commuters from various locations in the State of New Jersey into New York City. Operating exclusively on ultra-low sulfur diesel fuel, these CPF-equipped buses will further significantly reduce harmful emissions of carbon monoxide, hydrocarbons, and particulate matter in both New Jersey and New York. The project will be administered by the New Jersey Transit Corporation.

## B. New Jersey's proposed plan must:

- 1. Describe how the work or project to be performed is consistent with requirements of Section III.A, above;
- 2. Include a general schedule and budget (for \$2.7 million) for completion of the work, including payment instructions for VEPCO's submission of funds to the State, along with a requirement of periodic reports to all Parties on the progress of the work called for in the proposed plan through completion of the project;
- 3. Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
- 4. Describe briefly how the work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once a plan exists for this project or work and VEPCO has transferred at least \$2.7 million to New Jersey to complete the project or work described in the plan. VEPCO shall transfer this sum as soon as possible after the proposed plan is developed but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date.

# IV. School Bus Retrofit Project - To be Conducted in the State of Connecticut

A. The State of Connecticut will supply VEPCO and the U.S. a plan to use \$1.1 million to purchase and install particulate filters for diesel school buses that operate in selected urban communities in that State. The proposed plan may include any combination of the following: (i) conversion of conventional diesel-powered, school buses to buses with particulate traps; (ii) procuring of ultra-low sulfur diesel fuel (and

necessary infrastructure) to power for up to three years buses converted in the manner described in (i), and/or (iii) install additional air pollution controls on such buses. The proposed plan will be limited to pollution control devices, fuels, and other measures needed to convert diesel buses to include CRT or other particulate traps and other controls (including support infrastructure).

# B. Connecticut's proposed plan must:

- 1. Describe how the work or project to be performed is consistent with requirements of Section IV.A, above;
- 2. Include a general schedule and budget (for \$1.1 million) for completion of the work, including payment instructions for VEPCO's submission of funds to the State, along with a requirement of periodic reports to all Parties on the progress of the work called for in the proposed plan through completion of the project;
- 3. Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
- 4. Describe briefly how the work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once a plan exists for this project or work and VEPCO has transferred at least \$1.1 million to Connecticut to complete the project or work described in the plan. VEPCO shall transfer this sum as soon as possible after the proposed plan is developed but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date.

# V. School Bus Retrofit Program to be Carried Out in Commonwealth of Virginia

A. Commonwealth of Virginia shall supply to VEPCO and the U.S. a plan to use \$2.0 million to accomplish any combination of the following concerning in-service diesel-powered school buses in the Commonwealth: retrofitting buses with pollution control devices and techniques and infrastructure needed to support such retrofits, engine replacements that will reduce emissions of particulates or ozone precursors, and changeover to CNG fuel or low diesel fuel. These projects are to be carried out in areas either non in attainment with ambient air quality standards in the Commonwealth or at risk of being reclassified as nonattainment, such as Fairfax, Hampton Roads, and Virginia Beach

### B. Commonwealth's proposed plan must:

- 1. Describe how the work or project to be performed is consistent with requirements of Section V.A, above;
- 2. Include a general schedule and budget (for \$2.0 million) for completion of

the work, including payment instructions for VEPCO's submission of funds to the Commonwealth, along with a requirement of periodic reports to all Parties on the progress of the work called for in the proposed plan through completion of the project;

- 3. Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
- 4. Describe briefly how the work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once a plan exists for this project or work and VEPCO has transferred at least \$2.0 million to the Commonwealth to complete the project or work described in the plan. VEPCO shall transfer this sum as soon as possible after the proposed plan is developed but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date

# VI. Protecting Forests and other Natural Resources in West Virginia's Cheat Gorge / Big Sandy Area.

- A. The State of West Virginia will supply VEPCO and the U.S. a \$2.0 million proposed plan for the purchase and maintenance of property and/or conservation easements that would preserve forests and other environmentally sensitive areas in and around the Cheat Gorge / Big Sandy area of the West Virginia, for the purposes of making or expanding a public wildlife management area in the State and thus preserving an important sources of carbon sequestration. The proposed plan also will include needed steps for securing and maintaining valid conservation easements under applicable law and for securing clear title, as applicable.
- B. West Virginia's proposed plan must:
  - 1. Describe how the work or project to be performed is consistent with requirements of Section VI.A, above;
  - 2. Include a general schedule and budget (for \$2.0 million) for completion of the work; including payment instructions for VEPCO's submission of funds to the State or its designee, along with a requirement of periodic reports to all Parties on the Progress of the work called for in the proposed plan through completion of the project;
  - 3. Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
  - 4. Describe briefly how work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once a plan exists for this project

- or work and VEPCO has transferred at least \$2.0 million to West Virginia or its designee. VEPCO shall transfer this sum as soon as possible after the proposed plan is developed but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date.
- D. If West Virginia is unwilling or unable to perform the project specified here, West Virginia, in consultation with VEPCO, shall select an alternative project or projects designed to accomplish the same kinds of goals as intended for this project. After proceeding through this proposed plan process for this alternative project(s), VEPCO shall fund such project or projects in the amount of \$2.0 million.

# VII. National Park Service Alternative-Fueled and Hybrid Vehicles Project.

A. The National Park Service will supply VEPCO a plan for using \$1.0 million in accordance with the Park System Resource Protection Act, 16 U.S.C Section 19jj, to improve air quality in and about the Shenandoah National Park, either by securing alternative-fueled vehicles for trial use in and around the Park (including necessary ancillary equipment such as a fueling station) or for implementing another project also intended to reduce damage to those resources caused by air pollution suffered by the Park.

## B. NPS's proposed plan must:

- 1. Describe how the work or project to be performed is consistent with requirements of Section VII.A, above;
- 2. Include a general schedule and budget (for \$1.0 million) for completion of the work; including payment instructions for VEPCO's submission of funds to the Natural Resource Damage and Assessment Fund, along with a requirement of periodic reports to all Parties on the Progress of the work called for in the proposed plan through completion of the work.
- 3. Describe generally the expected environmental benefit for project or work called for under the proposed plan; and
- 4. Describe briefly how work or project described in the proposed plan meets the requirements of Section XXI of the Decree.
- C. VEPCO's obligation for this project shall terminate once an approved plan exists for this project or work and VEPCO has transferred at least \$1.0 million to the Natural Resource Damage and Assessment Fund. VEPCO shall transfer this sum as soon as possible after the proposed plan is approved but no later than December 31, 2003, unless untimely submission of the proposed plan or material deficiency in such plan requires payment after that date.

Marin



# THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF THE ATTORNEY GENERAL

200 PORTLAND STREET
BOSTON, MASSACHUSETTS 02114

(617) 727-2200 www.ago.state.ma.us

By Express Mail

June 20, 2003

Thomas J. Sansonetti
Assistant Attorney General
Environment & Natural Resources Division
Department of Justice, P.O. Box 7611
Washington, D.C. 20044-7611

Re: Consent Decree in *United States v. Virginia Electric and Power Co.*, D.J. Ref. 90-5-2-1-07122.

Dear Mr. Sansonetti:

Pursuant to 28 C.F.R. § 50.7, we are writing today to offer comments on the proposed Consent Decree that the Department of Justice lodged on April 21, 2003, in *United States v. Virginia Electric and Power* Co. We submit these comments on behalf of the Commonwealth of Massachusetts ("the Commonwealth"). The Commonwealth has an interest in this matter because pollutants emitted from Virginia and West Virginia power plants are transported to Massachusetts on the prevailing winds.

The proposed Consent Decree requires the Defendant to install various emissions control equipment designed to reduce emissions of sulfur and nitrogen oxides. While this equipment will result in some emissions reductions, it is our understanding that there has been no demonstration that the level of controls required constitutes Best Available Control Technology (BACT). In fact, we understand from our state Department of Environmental Protection that the levels of controls required by the Consent Decree would not meet current BACT levels for sulfur dioxide and nitrogen oxides (no less strict than a 98% removal efficiency for SO<sub>2</sub>, and a 0.050 lb/mm BTU emissions rate for NO<sub>x</sub>). We do not question your exercise of enforcement discretion to settle this case without a BACT demonstration. Indeed, without knowing the evidence in your possession regarding the violations alleged in your Complaint, we are not even in a position to make any judgment on this. We did, however, want to comment on one structural aspect of the proposed settlement.

Consistent with standard practice, the Consent Decree seeks to resolve past claims under federal and state law. See Consent Decree ¶¶ 107, 117, 126. It also seeks, however, to resolve

future claims. See Consent Decree ¶ 108, 118, 127. We obviously have no problem with the provisions that make it clear that you, Virginia, and West Virginia will not sue the company over future modifications "that this Consent Decree expressly directs VEPCO to undertake." The protection afforded the Defendant goes significantly further, however. The Consent Decree seeks to preclude you, Virginia, and West Virginia – subject to certain stated qualifications – from bringing suit over future modifications regardless of whether they are required by the Consent Decree. In other words, so long as the Defendant's actions do not trigger the stated exceptions, the Defendant would be shielded from an enforcement suit brought by you for future violations of the NSR or PSD programs. Thus, even if the Defendant took actions in the future that otherwise violated NSR or PSD, you may well not be able to force the Defendant to install what constitutes BACT at that time, despite the fact that it appears that the company is not installing what constitutes BACT today. This "safe harbor" would last until 2016.

In this manner, you seek at this time to limit the future exercise of your enforcement discretion as to violations that may not first occur until over a decade from now. Whatever the extent of your ability to do this, we want to put all parties on notice that we do not consider the Commonwealth so bound. Cf. Citizens for a Better Environment-California v. Union Oil, 83 F.3d 1111, 1119-20 (9th Cir. 1996)(citizen suit under Clean Water Act not barred by prior settlement that limited the enforcement discretion of government regulators), cert. denied 519 U.S. 1101; same case, 996 F.Supp. 934 (N.D. CA 1997)(summary judgment granted for citizen plaintiffs). We reserve any and all rights the Commonwealth may have pursuant to Section 304 of the Clean Air Act to enforce against future violations by VEPCO of the NSR and PSD programs.

Very truly yours,

James R. Milkey

Assistant Attorney General, Chief Environmental Protection Division

cc. Margaret Stolfa, DEP Parties of Record

<sup>&</sup>lt;sup>1</sup>While this provision shares some similarities with the Clean Unit Exemption regulations promulgated on December 31, 2002, it is inconsistent with them in various respects. In addition, we note that those regulations are being challenged by the Commonwealth and thirteen other states in the D.C. Circuit Court of Appeals.

1	UNITED STATES DISTRICT COURT
2	FOR THE SOUTHERN DISTRICT OF ILLINOIS
3	
4	
5	UNITED STATES OF AMERICA, :
6	Plaintiff, :
7	v. : Number
8	ILLINOIS POWER COMPANY and : 99-CV-833-MJR
9	DYNEGY MIDWEST GENERATION, INC., :
10	Defendants. :
11	х
12	
13	
14	DEPOSITION OF MATT HABER
15	
16	
17	Washington, D.C.
18	Wednesday, August 14, 2002
19	X X
20	
21	REPORTED BY:
22	CARMEN SMITH

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1			CONTENTS	
2				
3	WITNE	ss	EXAMINA	ATION
4	MATT :	HABE	R	
5	by	Mr.	Gutermann 4	
6				
7			EXHIBITS	
8				
9	ЕХНІВ:	IT N	UMBER IDENTI	FIED
10				
11	Haber	1 -	Haber Expert Report	6
12	Haber	2 -	Expert Report Derivation of	
13			Particulate Removal Efficiency Table	
14			Revisions	54
15	Haber	3 -	Region 9 Guidance Document	118
16	Haber	4 -	Federal Register Notice	131
17	Haber	5 -	Howekamp Letter to Hilberg with	
18			Attached Ambient Air Quality Impact	
19			Report	137
20	Haber	6 -	Howekamp Letter to Clausen with	
21			Attached Air Quality Impact Report	150
22			continu	ıed

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1	EARIBITS	
2	EXHIBIT NUMBER	IDENTIFIED
3		
4	Haber 7 - "Prevention of Significant	
5	Deterioration Workshop Manual"	161
6	Haber 8 - 3/25/82 Konter letter to Math	ur 212
7	Haber 9 - construction permit	215
8	Haber 10 - 8/6/92 Sutton letter to Newton	n 221
9	Haber 11 - 1/4/79 USEPA guidance letter	255
10	Haber 12 - 12/1/87 Potter memo	260
11		
12	Recess	54
13	Recess	89
14	Recess 2:14 to 2:33 p.m	146
15	Recess 3:23 to 3:34 p.m	181
16	Recess 4:56 to 5:07 p.m	229
17		
18		
19		
20		
21		
22		

# Best Available Control Technologies for the Baldwin Generating Station, Baldwin, Illinois

Expert Report of

Matt Haber

Prepared for the United States in connection with:

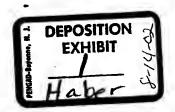
<u>United States v. Illinois Power Company And Dynegy Midwest Generation, Inc.,</u>

Civil Action No. 99-833-MJR

in the U.S. District Court for the Southern District of Illinois

APRIL 2002

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permits were being issued as of the date this report is submitted.

# II. Summary of Conclusions

In summary, and for the reasons described herein, I have concluded that the following emission rates and technologies would have been BACT for the pollutants at issue, and the Baldwin Station Units at issue, in the time frames specified below.

	<u>so,</u>	NO.	<u>PM</u>
1982 (Unit 3)	0.30 pounds per million BTU, based on 95% scrubbing and assuming coal with a 3-3.5% sulfur content, and use of a wet limestone scrubber Averaging time: 30 day rolling Monitored via CEMS <sup>2</sup>	0.40 pounds per million BTU, based on use of Low NO <sub>x</sub> Burners. Averaging time: 3 hour Monitored via CEMS	0.036 pounds per million BTU, 99.4% control, based on use of (then existing) ESP Averaging time: 3 hour Monitored via EPA method 5½, opacity monitor
1985 (Unit 1)	0.30 pounds per million BTU, based on 95% scrubbing and assuming coal with a 3-3.5% sulfur content, and use of a wet limestone scrubber Averaging time: 30 day rolling Monitored via CEMS	0.90 pounds per million BTU, based on use of selective catalytic reduction Averaging time: 3 hour Monitored via CEMS	0.003 pounds per million BTU, based on use of a baghouse Averaging time: 3 hour Monitored via EPA method 5, opacity monitor

<sup>1990),</sup> page B.55: "the BACT emission limit in a new source permit is not set until the final permit is issued."

<sup>&</sup>lt;sup>3</sup> Continuous Emissions Monitoring System

<sup>&</sup>lt;sup>3</sup> See 40 C.F.R 60 Appendix A

1988 (Unit 2)	0.30 pounds per million BTU, based on 95% scrubbing and assuming coal with a 3-3.5% sulfur content, and use of a wet limestone scrubber Averaging time: 30 day rolling Monitored via CEMS	0.36 pounds per million BTU, based on use of selective catalytic reduction Averaging time: 3 hour Monitored via CEMS	0.003 pounds per million BTU. based on use of a baghouse Averaging time: 3 hour Monitored via EPA method 5, opacity monitor
2002 (Units 1 & 2)	0.095 pounds per million BTU, based on 95% scrubbing, and assuming use of coal with 0.6% sulfur content Averaging time: 30 day rolling Monitored via CEMS	0.14 pounds per million BTU, based on use of overfire air, selective catalytic reduction, and an optimization system Averaging time: 3 hour Monitored via CEMS	0.006 pounds per million BTU, based on use of a baghouse Averaging time: 3 hour Monitored via EPA method 5, triboelectric broken bag monitors
2002 (Unit 3)	0.095 pounds per million BTU, based on 95% scrubbing, and assuming use of coal with 0.6% sulfur content Averaging time: 30 day rolling Monitored via CEMS	0.020 pounds per million BTU, based on use of low-NO <sub>x</sub> burners, selective catalytic reduction, and an optimization system. Limit may be adjusted as high as 0.040 pounds per million BTU if lower limit is demonstrated to be unachievable. Averaging time: 3 hour Monitored via CEMS	0.015 pounds per million BTU, based on use of a ESP. Averaging time: 3 hour Monitored via EPA method 5, PM CEMS*

# III. Qualifications

I have been involved in BACT decisions in a variety of capacities at EPA's Region 9 for over twenty one years. I began work for EPA Region 9 in 1980 as a staff engineer in the New Source Section of what was then called the Enforcement Division. The primary function of this section

<sup>&</sup>lt;sup>3</sup> See http://www.epa.gov/ttn/emc/propperf/ps-11&frnotice.pdf, proposed Performance Specification for Continuous PM Monitoring Systems.

1:03-cv-00517

Richard W. Sponseller, Esq. United States Attorney's Office 2100 Jamieson Ave Alexandria, VA 22314

pmil